



Australian Government

ICP Printing and Graphic Arts

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ICP20115 Certificate II in Printing and Graphic Arts (General)

Modification History

Release	Comments
Release 2	This version released with ICP Printing and Graphic Arts Training Package Version 2.0. Version created to update unit list
Release 1	This qualification first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Qualification Description

This qualification applies to individuals who perform a range of mainly routine tasks in the printing and graphic arts industry. They work under direct supervision, and use limited practical skills and fundamental operational knowledge in a defined context.

It is a preparatory qualification that can be used as a pathway into a range of specialist Certificate III qualifications within the printing and graphic arts industry.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

Entry Requirements

Nil

Packaging Rules

Total number of units = 15 units

4 core units, plus

11 elective units of which:

- 8 elective units must be selected from the elective groups below
- 3 elective units may be selected from the remaining elective units or from qualifications at the same level or one level higher in any endorsed training package or accredited course.

Elective units must be relevant to the work environment and the qualification, maintain the integrity of the AQF alignment and contribute to a valid, industry-supported vocational outcome.

Refer to the Companion Volume Implementation Guide for advice about choosing electives to support specialisations in particular sectors of the printing and graphics arts industry.

Core units

BSBSUS201 Participate in environmentally sustainable work practices

ICPSUP216 Inspect quality against required standards

ICPSUP260 Maintain a safe work environment

ICPSUP262 Communicate in the workplace

Elective units

Group A

Converting, binding and finishing

ICPCBF105 Operate in-line mail machine

ICPCBF202 Handline mail

ICPCBF203 Collate and insert mail manually

ICPCBF204 Operate addressing machine

ICPCBF208 Set up and operate a cheque mailer machine

ICPCBF209 Set up and operate in-line mail machine

ICPCBF211 Set up and run machine for sewing

ICPCBF214 Set up single-faced web

ICPCBF216 Set up double-faced web

ICPCBF218 Produce basic folded and glued cartons

ICPCBF220 Produce basic converted or finished product

ICPCBF221 Set up and produce basic guillotined product

ICPCBF222 Set up and operate in-line cutter

ICPCBF223 Set up machine for cutting (trimming)

ICPCBF224 Produce cut (trimmed) product

ICPCBF225 Set up machine for basic flat-bed die cutting or embossing

ICPCBF226 Produce basic flat-bed die cut or embossed product

ICPCBF227 Set up machine for basic rotary die cutting or embossing

ICPCBF228 Produce basic rotary die cut or embossed product
ICPCBF231 Set up machine for basic flat-bed cutting
ICPCBF232 Produce basic flat-bed cut product
ICPCBF235 Set up machine for basic rotary cutting
ICPCBF236 Produce basic rotary cut product
ICPCBF241 Set up machine for basic single or continuous folding
ICPCBF242 Produce basic single or continuous folded product
ICPCBF243 Set up machine for basic collating or inserting (sheet/section)
ICPCBF244 Produce basic collated or inserted (sheet/section) product
ICPCBF245 Set up and produce hand-collated or inserted product
ICPCBF261 Set up machine for basic adhesive, mechanical or thermal fastening
ICPCBF262 Produce basic adhesive, mechanical or thermal fastened product
ICPCBF263 Set up and produce hand-fastened product
ICPCBF281 Set up machine for basic laminating
ICPCBF282 Produce basic laminated product
ICPCBF294 Set up profile cutting for envelope manufacture
ICPCBF297 Clean sack and bag machines
ICPCBF298 Run and monitor sack and bag machines
ICPCBF300* Run and monitor in-line tube making machine for sack or bag manufacture
ICPCBF301* Run and monitor in-line bottom making machine for sack or bag manufacture
ICPCBF305 Produce single-faced web
ICPCBF307 Produce double-faced web
ICPCBF311 Prepare for cutting forme and stripper making
ICPCBF312 Set cutting forme and strippers
ICPCBF341 Set up machine for complex sequenced or multiple folding
TLIA2043A Consolidate mail
TLIA2047A Stream mail
TLIA2041A Manually sort mail and parcels
TLIW3006A Operate computerised mail and parcels sorting equipment

Group B

Ink manufacture

ICPINK211 Select and prepare materials for production
ICPINK221 Blend chemicals

ICPINK251 Filter and pack product

ICPINK331 Manufacture inks and coatings

ICPINK335 Manufacture varnish and resin

Group C

Digital media technologies

ICPDMT263 Access and use the Internet

ICPDMT296 Create and test a CD-ROM/DVD

ICPDMT321 Capture a digital image

ICPDMT322 Edit a digital image

ICTWEB429 Create a markup language document to specification

Group D

Pre-press

ICPPRP211 Develop a basic design concept

ICPPRP221 Select and apply type

ICPPRP223 Photograph a line image

ICPPRP224 Produce pages using a page layout application

ICPPRP225 Produce graphics using a graphics application

ICPPRP231 Manually combine spot colour and basic four-colour images

ICPPRP232 Electronically combine and assemble data

ICPPRP252 Output images

ICPPRP260 Proof images

ICPPRP266 Produce relief plates

ICPPRP267 Produce offset lithographic plates

ICPPRP268 Make photopolymer plates (flexographic)

ICPPRP269 Produce photopolymer plates for pad printing

ICPPRP272 Produce gravure cylinders manually

ICPPRP281 Design basic carton

ICPPRP283 Prepare artwork for screen printing

ICPPRP284 Produce PDF files for online or screen display

ICPPRP286 Scan images for reproduction

ICPPRP321* Produce a typographic image

ICPPRP322 Digitise images for reproduction

ICPPRP385 Operate a database for digital printing

ICPPRP397 Transfer digital files

Group E

Printing

ICPPRN211 Mount and proof flexographic plates for basic printing

ICPPRN214 Produce basic flexographic printed product

ICPPRN222 Produce basic gravure printed product

ICPPRN232 Produce basic lithographic printed product

ICPPRN242 Produce basic pad printed product

ICPPRN261 Set up for foil stamping

ICPPRN262 Produce foil stamped product

ICPPRN271 Set up for basic coating

ICPPRN272 Produce basic coated product

ICPPRN282 Produce and manage basic digital print

ICPPRN283 Use digital media consumables

ICPPRN284 Use colour management systems

ICPPRN285 Use digital workflow

ICPPRN286 Finish a digital product

ICPPRN287 Use digital processes

ICPPRN288 Produce basic relief printed product

ICPPRN313 Set up for basic flexographic printing

ICPPRN341 Set up for basic pad printing

ICPPRN384 Set up and produce basic digital print

Group F

Screen printing

ICPSCP211 Reclaim screen automatically

ICPSCP215 Prepare screen

ICPSCP221 Prepare substrate

ICPSCP222 Prepare and cut screen print substrate

ICPSCP233 Manually prepare direct emulsion stencil

ICPSCP235 Prepare stencil using photographic indirect method

ICPSCP270 Manually prepare and produce screen prints

ICPSCP271 Manually produce basic screen prints
ICPSCP273 Semi-automatically produce basic screen prints
ICPSCP275 Automatically produce basic screen prints
ICPSCP281 Finish screen print products
ICPSCP282 Prepare film for basic screen printing
ICPSCP311 Reclaim screen manually
ICPSCP383 Prepare film for complex screen printing

Group G

Support

BSBCUS301 Deliver and monitor a service to customers
ICPSUP120 Pack product
ICPSUP201 Prepare, load and unload reels and cores on and off machine
ICPSUP202 Prepare, load and unload product on and off machine
ICPSUP203 Prepare and maintain the work area
ICPSUP207 Prepare machine for operation (basic)
ICPSUP208 Operate and monitor machines (basic)
ICPSUP211 Prepare ink and additives
ICPSUP212 Prepare coatings and adhesives
ICPSUP221 Pack and dispatch product
ICPSUP222 Pack and dispatch solid waste
ICPSUP235 Lift loads mechanically
ICPSUP236 Shift loads mechanically
ICPSUP241 Undertake warehouse or stores materials processing
ICPSUP243 Reconcile process outputs
ICPSUP261 Follow WHS practices and identify environmental hazards
ICPSUP263 Perform basic industry calculations
ICPSUP271 Provide basic instruction for a task
ICPSUP280 Enter data into electronic system
ICPSUP281 Use computer systems
ICPSUP282 Undertake basic machine maintenance
ICPSUP323 Dispose of waste
ICPSUP342 Undertake inventory procedures
ICPSUP357 Apply quick changeover procedures

ICPSUP389 Undertake basic root cause analysis

MSAENV272B Participate in environmentally sustainable work practices

MSS402010A Manage the impact of change on own work

MSS402001A Apply competitive systems and practices

MSS402002A Sustain process improvements

MSS402030A Apply cost factors to work practices

MSS402040A Apply 5S procedures

MSS402080A Undertake root cause analysis

* Note the following prerequisite unit requirements:

Unit in this qualification	Prerequisite unit
ICPCBF300 Run and monitor in-line tube making machine for sack or bag manufacture	ICPCBF298 Run and monitor sack and bag machines
ICPCBF301 Run and monitor in-line bottom making machine for sack or bag manufacture	ICPCBF298 Run and monitor sack and bag machines
ICPPRP321 Produce a typographic image	ICPPRP221 Select and apply type

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICP20115 Certificate II in Printing and Graphic Arts Release 2	ICP20115 Certificate II in Printing and Graphic Arts Release 1	Updated unit list	Equivalent qualification

Links

Companion Volume implementation guides are found in VETNet -

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ICP31215 Certificate III in Printing

Modification History

Release	Comments
Release 2	This version was released with ICP Printing and Graphic Arts Training Package Version 3.0. Updates to elective unit list.
Release 1	This qualification first released with ICP Printing and Graphic Arts Training Package Version 2.0.

Qualification Description

This qualification applies to individuals working as print machinists who typically set up and operate letterpress, lithographic, flexographic, gravure printing presses, digital printers or screen printers and work on a range of printed products. They prepare material, monitor and run equipment and machinery and apply solutions to a defined range of unpredictable problems. They may also provide leadership and guidance to others with some limited responsibility for the output of others.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

Entry Requirements

Nil

Packaging Rules

Total number of units = 21 units

4 core units, plus

17 elective units of which:

- 8 elective units must be from Group A
- 4 elective units must be from Group B
- 3 elective units must be from Group A, B and/or C
- the remaining 2 elective units may be selected from the remaining elective units, from any currently endorsed training package or accredited course at Certificate III or IV level.

This qualification can provide for specialisations in specific modes of printing. Elective units that support the particular specialisation must be selected from Group B. Refer to the Companion Volume Implementation Guide for specific advice about choosing electives to support specialisations.

Elective units must be relevant to the work environment and the qualification, maintain the integrity of the AQF alignment and contribute to a valid, industry-supported vocational outcome.

Core units

BSBSUS201 Participate in environmentally sustainable work practices

ICPSUP216 Inspect quality against required standards

ICPSUP260 Maintain a safe work environment

ICPSUP262 Communicate in the workplace

Elective units

Group A

ICPCBF220 Produce basic converted or finished product

ICPCBF281 Set up machine for basic laminating

ICPCBF282 Produce basic laminated product

ICPKNW322 Develop knowledge of the printing and graphic arts industry

ICPPRN214 Produce basic flexographic printed product

ICPPRN222 Produce basic gravure printed product

ICPPRN232 Produce basic lithographic printed product

ICPPRN242 Produce basic pad printed product

ICPPRN261 Set up for foil stamping

ICPPRN262 Produce foil stamped product

ICPPRN271 Set up for basic coating

ICPPRN272 Produce basic coated product

ICPPRN282 Produce and manage basic digital print

ICPPRN288 Produce basic relief printed product

ICPPRN313 Set up for basic flexographic printing

ICPPRN321 Set up for basic gravure printing

ICPPRN331 Set up for basic lithographic printing

ICPPRN341 Set up for basic pad printing

ICPPRN384 Set up and produce basic digital print
ICPPRN393 Set up for basic relief printing
ICPPRP211 Develop a basic design concept
ICPPRP221 Select and apply type
ICPPRP266 Produce relief plates
ICPPRP267 Produce offset lithographic plates
ICPPRP268 Make photopolymer plates (flexographic)
ICPPRP269 Produce photopolymer plates for pad printing
ICPPRP272 Produce gravure cylinders manually
ICPSCP271 Manually produce basic screen prints
ICPSCP273 Semi-automatically produce basic screen prints
ICPSCP275 Automatically produce basic screen prints
ICPSUP203 Prepare and maintain the work area
ICPSUP207 Prepare machine for operation (basic)
ICPSUP208 Operate and monitor machines (basic)
ICPSUP211 Prepare ink and additives
ICPSUP263 Perform basic industry calculations
ICPSUP281 Use computer systems
ICPSUP282 Undertake basic machine maintenance
ICPSUP352 Plan operational processes

Group B

ICPCBF381 Set up machine for complex laminating
ICPCBF382 Produce complex laminated product
ICPPRN314 Produce complex flexographic printed product
ICPPRN322 Produce complex gravure printed product
ICPPRN332 Produce complex lithographic printed product
ICPPRN342 Produce complex pad printed product
ICPPRN382 Produce and manage complex digital print
ICPPRN385* Apply software applications to digital production
ICPPRN392 Set up and produce specialised digital print
ICPPRN394 Produce complex relief printed product
ICPPRN413 Set up for complex flexographic printing
ICPPRN421 Set up for complex gravure printing

ICPPRN431 Set up for complex lithographic printing
ICPPRN441 Set up for complex pad printing
ICPPRN451 Set up for complex relief printing
ICPPRN471 Set up for complex coating
ICPPRN472 Produce complex coated product
ICPPRN496* Set up and produce complex digital print
ICPPRP372 Produce gravure cylinders electronically
ICPPTD301 Manipulate 3D files in preparation for 3D printing
ICPPTD302 Set up and produce 3D prints
ICPPTD303 Set up and produce 3D scans
ICPPTD304 Apply problem solving techniques to 3D printing maintenance and operation
ICPSCP371 Manually produce complex screen prints
ICPSCP373 Semi-automatically produce complex screen prints
ICPSCP374 Operate a semi-automatic screen printing machine
ICPSCP376 Operate an automatic screen printing machine
ICPSUP201 Prepare, load and unload reels and cores on and off machine or,
ICPSUP202 Prepare, load and unload product on and off machine
ICPSUP357 Apply quick changeover procedures

Group C

BSBCUS301 Deliver and monitor a service to customers
BSBITU306 Design and produce business documents
BSBSMB301 Investigate micro business opportunities
BSBSMB402 Plan small business finances
BSBSMB403 Market the small business
ICPCBF221 Set up and produce basic guillotined product
ICPCBF225 Set up machine for basic flat-bed die cutting or embossing
ICPCBF226 Produce basic flat-bed die cut or embossed product
ICPCBF231 Set up machine for basic flat-bed cutting
ICPCBF232 Produce basic flat-bed cut product
ICPCBF241 Set up machine for basic single or continuous folding
ICPCBF242 Produce basic single or continuous folded product
ICPCBF243 Set up machine for basic collating or inserting (sheet/section)
ICPCBF244 Produce basic collated (sheet/section) product

ICPCBF341 Set up machine for complex sequenced or multiple folding

ICPPRN211 Mount and proof flexographic plates for basic printing

ICPPRN284 Use colour management systems

ICPPRN383 Prepare for personalised digital printing

ICPPRN386 Troubleshoot digital media

ICPPRN387* Use colour management for production

ICPPRN388 Preflight and import complex images for digital device

ICPPRN389 Manage digital files

ICPPRN390 Generate a proof for digital production

ICPPRN484 Prepare for variable data printing

ICPPRN494* Apply advanced software applications to digital production

ICPPRP223 Photograph a line image

ICPPRP224 Produce pages using a page layout application

ICPPRP231 Manually combine spot colour and basic four-colour images

ICPPRP232 Electronically combine and assemble data

ICPPRP252 Output images

ICPPRP283 Prepare artwork for screen printing

ICPPRP284 Produce PDF files for online or screen display

ICPPRP286 Scan images for reproduction

ICPPRP311* Develop a detailed design concept

ICPPRP321* Produce a typographic image

ICPPRP322 Digitise images for reproduction

ICPPRP323 Photograph and produce halftone images

ICPPRP334 Prepare an imposition format for printing processes

ICPPRP352 Output complex images

ICPPRP370 Produce multiple image plates

ICPPRP382 Produce computer image for screen printing

ICPPRP385 Operate a database for digital printing

ICPPRP396* Generate high-end PDF files

ICPPRP397 Transfer digital images

ICPPRP422 Digitise complex images for reproduction

ICPPRP430 Manage colour

ICPPRP452* Output complex images direct to plate or press

ICPPRP484 Set up and operate automated workflow

ICPSCP211 Reclaim screen automatically
ICPSCP215 Prepare screen
ICPSCP221 Prepare substrate
ICPSCP222 Prepare and cut screen print substrate
ICPSCP233 Manually prepare direct emulsion stencil
ICPSCP235 Prepare stencil using photographic indirect method
ICPSCP270 Manually prepare and produce screen prints
ICPSCP281 Finish screen print products
ICPSCP282 Prepare film for basic screen printing
ICPSCP311 Reclaim screen manually
ICPSCP333 Automatically prepare direct emulsion stencil
ICPSCP337 Prepare stencil using photographic capillary method
ICPSCP339 Prepare stencil using direct projection method
ICPSCP341 Prepare stencil using direct electronic imaging method
ICPSCP351 Prepare machine and drying/curing unit
ICPSCP382 Produce computer image for screen printing
ICPSCP383 Prepare film for complex screen printing
ICPSUP212 Prepare coatings and adhesives
ICPSUP221 Pack and dispatch product
ICPSUP222 Pack and dispatch solid waste
ICPSUP235 Lift loads mechanically
ICPSUP236 Shift loads mechanically
ICPSUP241 Undertake warehouse or stores materials processing
ICPSUP271 Provide basic instruction for a task
ICPSUP311* Prepare ink and additives (advanced)
ICPSUP321 Pack and dispatch (advanced)
ICPSUP323 Dispose of waste
ICPSUP342 Undertake inventory procedures
ICPSUP351 Undertake basic production scheduling
ICPSUP362 Communicate as part of a work team
ICPSUP381 Operate and maintain computer resources
ICPSUP464 Provide customer service and education
ICPSUP485 Implement a Just-in-Time system
ICTWEB429 Create a markup language document to specification

MSAENV272B Participate in environmentally sustainable work practices

MSAPMSUP390A Use structured problem solving tools

MSS402001A Apply competitive systems and practices

MSS402002A Sustain process improvements

MSS402010A Manage the impact of change on own work

MSS402030A Apply cost factors to work practices

MSS402040A Apply 5S procedures

MSS402080A Undertake root cause analysis

SIRXSLS002A Advise on products and services

SIRXSLS201 Sell products and services

* Note the following prerequisite unit requirements:

Unit in this qualification	Prerequisite unit
ICPPRN385 Apply software applications to digital production	ICPSUP281 Use computer systems
ICPPRN387 Use colour management for production	ICPPRN284 Use colour management systems
ICPPRN494 Apply advanced software applications to digital production	ICPPRN385 Apply software applications to digital production
ICPPRN496 Set up and produce complex digital print	ICPPRN384 Set up and produce basic digital print
ICPPRP311 Develop a detailed design concept	ICPPRP211 Develop a basic design concept
ICPPRP321 Produce a typographic image	ICPPRP221 Select and apply type
ICPPRP396 Generate high-end PDF files	ICPPRP284 Produce PDF files for online or screen display
ICPPRP452 Output complex images direct to plate or press	ICPPRP352 Output complex images
ICPSUP311 Prepare ink and additives (advanced)	ICPSUP211 Prepare ink and additives

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICP31215 Certificate III in Printing (Release 2)	ICP31215 Certificate III in Printing (Release 1)	Updates to unit codes and additions to elective unit list	Equivalent qualification

Links

Companion Volume Implementation Guides are available from VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICP31315 Certificate III in Print Manufacturing

Modification History

Release	Comments
Release 2	This version was released with ICP Printing and Graphic Arts Training Package Version 3.0. Updates to elective unit list.
Release 1	This qualification first released with ICP Printing and Graphic Arts Training Package Version 2.0.

Qualification Description

This qualification applies to individuals working in the print manufacturing area creating printed products by hand or machine. They are responsible for post-press and finishing stages of the print process and apply solutions to a defined range of unpredictable problems. They may provide leadership and guidance to others with some limited responsibility for the output of others.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

Entry Requirements

Nil

Packaging Rules

Total number of units = 21

4 core units plus

17 elective units of which:

- 8 elective units must be from Group A
- 4 elective units must be from Group B
- 3 elective units must be from Groups A, B and or C
- the remaining 2 elective units may be selected from any currently endorsed training package or accredited course at Certificate III or IV level.

This qualification can provide for specialisations in particular areas of print manufacturing. Elective units that support the particular specialisation must be selected from Group B. Refer to the Companion Volume Implementation Guide for specific advice about choosing electives to support specialisations.

Elective units must be relevant to the work environment and the qualification, maintain the integrity of the AQF alignment and contribute to a valid, industry-supported vocational outcome.

Core units

BSBSUS201 Participate in environmentally sustainable work practices

ICPSUP216 Inspect quality against required standards

ICPSUP260 Maintain a safe work environment

ICPSUP262 Communicate in the workplace

Elective units

Group A

ICPCBF220 Produce basic converted or finished product

ICPCBF221 Set up and produce basic guillotine product

ICPCBF225 Set up machine for basic flat-bed die cutting or embossing

ICPCBF226 Produce basic flat-bed die cut or embossed product

ICPCBF231 Set up machine for basic flat-bed cutting

ICPCBF232 Produce basic flat-bed cut product

ICPCBF241 Set up machine for basic single or continuous folding

ICPCBF242 Produce basic single or continuous folded product

ICPCBF243 Set up machine for basic collating or inserting (sheet/section)

ICPCBF244 Produce basic collated (sheet/section) product

ICPCBF261 Set up machine for basic adhesive, mechanical or thermal fastening

ICPCBF281 Set up machine for basic laminating

ICPCBF282 Produce basic laminated product

ICPCBF298 Run and monitor sack and bag machines

ICPCBF306 Set up machine for basic carton folding and gluing

ICPINK211 Select and prepare materials for production

ICPINK221 Blend chemicals

ICPINK331 Manufacture inks and coatings

ICPKNW322 Develop knowledge of the printing and graphic arts industry
ICPPRN261 Set up for foil stamping
ICPPRN262 Produce foil stamped product
ICPPRN271 Set up for basic coating
ICPPRN272 Produce basic coated product
ICPPRN282 Produce and manage basic digital print
ICPPRN288 Produce basic relief printed product
ICPPRN313 Set up for basic flexographic printing
ICPPRN384 Set up and produce basic digital print
ICPPRN393 Set up for basic relief printing
ICPPRP281 Design basic carton
ICPPRP430 Manage colour
ICPPTD301 Manipulate 3D files in preparation for 3D printing
ICPPTD302 Set up and produce 3D prints
ICPPTD303 Set up and produce 3D scans
ICPPTD304 Apply problem solving techniques to 3D printing maintenance and operation
ICPSUP203 Prepare and maintain the work area
ICPSUP211 Prepare ink and additives
ICPSUP212 Prepare coatings and adhesives
ICPSUP351 Undertake basic production scheduling
ICPSUP352 Plan operational processes
ICPSUP357 Apply quick changeover procedures
TLIA2041A Manually sort mail and parcels

Group B

ICPCBF294 Set up profile cutting for envelope manufacture
ICPCBF300* Run and monitor in-line tube making machine for sack or bag manufacture
ICPCBF303 Run and monitor envelope manufacturing machines
ICPCBF305 Produce single-faced web
ICPCBF307 Produce double-faced web
ICPCBF309 Produce complex folded and glued cartons
ICPCBF311 Prepare for cutting forme and stripper making
ICPCBF312 Set cutting forme and strippers
ICPCBF320 Produce complex converted or finished product

ICPCBF321 Set up and produce complex guillotined product

ICPCBF326 Undertake pre make-ready for die cutting

ICPCBF327 Set up machine for complex rotary die cutting or embossing

ICPCBF328 Produce complex rotary die cut or embossed product

ICPCBF341 Set up machine for complex sequenced or multiple folding

ICPCBF342 Produce complex sequenced or multiple folded product

ICPCBF343 Set up machine for complex collating or inserting (sheet/section/reel)

ICPCBF344 Produce complex collated or inserted product

ICPCBF361 Set up machine for complex adhesive, mechanical or sewn fastening

ICPCBF362 Produce complex adhesive, mechanical or sewn fastened product

ICPCBF369 Set up and produce hand-made box

ICPCBF371 Decorate paper

ICPCBF381 Set up machine for complex laminating

ICPCBF382 Produce complex laminated product

ICPCBF391 Use electronic monitoring systems (converting and finishing)

ICPCBF392 Produce product on window gluer

ICPCBF393 Set up machine for envelope manufacture

ICPCBF395 Set up and operate folder gluer machine

ICPCBF396 Set up in-line scoring, folding and gluing machine for envelope manufacture

ICPCBF398* Set up in-line bottom making machine for sack or bag manufacture

ICPCBF406 Set up and load in-line smart card machine

ICPCBF407 Operate a smart card machine and pack product

ICPCBF410 Set up machine for complex carton folding and gluing

ICPCBF426 Produce complex flat-bed die cut or embossed product

ICPCBF465 Set up and produce hand-bound book

ICPPRN314 Produce complex flexographic printed product

ICPPRN382 Produce and manage complex digital print

ICPPRN383 Prepare for personalised digital printing

ICPPRN484 Prepare for variable data printing

ICPPRN493 Set up and monitor in-line printing operations

ICPPRP322 Digitise images for reproduction

ICPPRP385 Operate a database for digital printing

ICPPRP481 Design complex carton

ICPSUP201 Prepare, load and unload reels and cores on and off machine OR

ICPSUP202 Prepare, load and unload product on and off machine

Group C

BSBFLM309 Support continuous improvement systems and processes

BSBINN201 Contribute to workplace innovation

BSBWOR301 Organise personal work priorities and development

ICPSUP207 Prepare machine for operation (basic)

ICPSUP208 Operate and monitor machines (basic)

ICPSUP221 Pack and dispatch product

ICPSUP222 Pack and dispatch solid waste

ICPSUP235 Lift loads mechanically

ICPSUP236 Shift loads mechanically

ICPSUP241 Undertake warehouse or stores materials processing

ICPSUP243 Reconcile process outputs

ICPSUP263 Perform basic industry calculations

ICPSUP271 Provide basic instruction for a task

ICPSUP281 Use computer systems

ICPSUP282 Undertake basic machine maintenance

ICPSUP311* Prepare ink and additives (advanced)

ICPSUP321 Pack and dispatch (advanced)

ICPSUP323 Dispose of waste

ICPSUP342 Undertake inventory procedures

ICPSUP345 Purchase materials and schedule deliveries

ICPSUP362 Communicate as part of a work team

ICPSUP381 Operate and maintain computer resources

ICPSUP417 Perform laboratory quality tests of materials and finished product

ICPSUP456 Control production

ICPSUP487 Analyse manual handling processes

ICPSUP488 Ensure process improvements are sustained

ICPSUP554 Manage teams

ICTWEB429 Create a markup language document to specification

MSAENV272B Participate in environmentally sustainable work practices

MSAPMSUP390A Use structured problem solving tools

MSL933001A Maintain the laboratory/field workplace fit for purpose

MSL954001A Obtain representative samples in accordance with sampling plan

MSL973001A Perform basic tests

MSL973002A Prepare working solutions

MSL974001A Prepare, standardise and use solutions

MSS402001A Apply competitive systems and practices

MSS402002A Sustain process improvements

MSS402010A Manage the impact of change on own work

MSS402030A Apply cost factors to work practices

MSS402040A Apply 5S procedures

MSS402080A Undertake root cause analysis

* Note the following prerequisite unit requirements:

Unit in this qualification	Prerequisite unit
ICPCBF300 Run and monitor in-line tube making machine for sack or bag manufacture	ICPCBF298 Run and monitor sack and bag machines
ICPCBF398 Set up in-line bottom making machine for sack or bag manufacture	ICPCBF298 Run and monitor sack and bag machines
ICPSUP311 Prepare ink and additives (advanced)	ICPSUP211 Prepare ink and additives

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICP31315 Certificate III in Print Manufacturing (Release 2)	ICP31315 Certificate III in Print Manufacturing (Release 1)	Updates to unit codes and additions to elective unit list	Equivalent qualification

Links

Companion Volume Implementation Guides are available from VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICP31415 Certificate III in Print Communications

Modification History

Release	Comments
Release 2	This version was released with ICP Printing and Graphic Arts Training Package Version 3.0. Updates to elective unit list.
Release 1	This qualification first released with ICP Printing and Graphic Arts Training Package Version 2.0.

Qualification Description

This qualification applies to individuals working as a pre-media tradesperson. Typically they design and prepare layouts and artwork, manipulate images and text to meet production and design requirements and apply solutions to a defined range of problems associated with, and characteristic to, the print medium. They may also provide some leadership and guidance to others with some limited responsibility for the output of others.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

Entry Requirements

Nil

Packaging Rules

Total number of units = 21 units

4 core units, plus

17 elective units of which:

- 8 elective units must be from Group A
- 4 elective units must be from Group B
- the remaining 5 elective units may be selected from Groups A, B and or C, or any currently endorsed training package or accredited course at Certificate III or IV level.

Elective units must be relevant to the work environment and the qualification, maintain the integrity of the AQF alignment and contribute to a valid, industry-supported vocational outcome.

Core units

BSBSUS201 Participate in environmentally sustainable work practices

ICPSUP216 Inspect quality against required standards

ICPSUP260 Maintain a safe work environment

ICPSUP262 Communicate in the workplace

Elective units**Group A**

CUAACD101 Use basic drawing techniques

CUAACD201 Develop drawing skills to communicate ideas

CUADIG201 Maintain interactive content

CUAGRD302 Use typography techniques

ICPDMT263 Access and use the internet

ICPDMT322 Edit a digital image

ICPKNW322 Apply knowledge of the printing and graphic arts industry

ICPPRN282 Produce and manage basic digital print

ICPPRN284 Use colour management systems

ICPPRP211 Develop a basic design concept

ICPPRP221 Select and apply type

ICPPRP224 Produce pages using a page layout application

ICPPRP225 Produce graphics using a graphics application

ICPPRP252 Output images

ICPPRP260 Proof images

ICPPRP284 Produce PDF files for online or screen display

ICPPRP286 Scan images for reproduction

ICPPRP321* Produce a typographic image

ICPPRP322 Digitise images for reproduction

ICPPRP324* Create pages using a page layout application

ICPPRP333 Electronically combine complex images

ICPPRP397 Transfer digital files

Group B

CUAACD401 Integrate colour theory and design processes

CUAANM301 Create 2D digital animation

CUADIG404 Apply scripting language to authoring

ICPDMT321 Capture a digital image

ICPDMT344 Manipulate and incorporate audio into multimedia presentations

ICPDMT346 Incorporate video into multimedia presentations

ICPPRN383 Prepare for personalised digital printing

ICPPRN384 Set up and produce basic digital print

ICPPRN387* Use colour management for production

ICPPRN388 Preflight and import complex images for digital device

ICPPRN389 Manage digital files

ICPPRN495* Set up and use complex colour management for production

ICPPRP231 Manually combine spot colour and basic four-colour images

ICPPRP266 Produce relief plates

ICPPRP267 Produce offset lithographic plates

ICPPRP268 Make photopolymer plates (flexographic)

ICPPRP269 Produce photopolymer plates for pad printing

ICPPRP272 Produce gravure cylinders manually

ICPPRP311* Develop a detailed design concept

ICPPRP325 Create graphics using a graphics application

ICPPRP331 Manually combine complex four-colour images

ICPPRP334 Prepare an imposition format for printing processes

ICPPRP352 Output complex images

ICPPRP370 Produce multiple image plates

ICPPRP372 Produce gravure cylinders electronically

ICPPRP385 Operate a database for digital printing

ICPPRP386 Undertake digital proofing

ICPPRP396* Generate high-end PDF files

ICPPRP411* Undertake a complex design brief

ICPPRP421* Compose and evaluate typography

ICPPRP423 Apply colour to design brief

ICPPRP430 Manage colour

ICPPRP435 Generate complex imposition

ICPPRP452* Output complex images direct to plate or press

Group C

BSBCMM401 Make a presentation

BSBCUS301 Deliver and monitor a service to customers

BSBDES302 Explore and apply the creative design process to 2D forms

BSBINN201 Contribute to workplace innovation

ICPDMT296 Create and test a CD-ROM/DVD

ICPSUP345 Purchase materials and schedule deliveries

ICPSUP351 Undertake basic production scheduling

ICPSUP362 Communicate as part of a work team

ICPSUP381 Operate and maintain computer resources

ICPSUP456 Control production

ICTNWK414 Create a common gateway interface script

ICTWEB409 Develop cascading style sheets

ICTWEB410 Apply web authoring tool to convert client data for websites

ICTWEB418 Use development software and ICT tools to build a basic website

ICTWEB421 Ensure website content meets technical protocols and standards

ICTWEB429 Create a markup language document to specification

ICTWEB510 Analyse information and assign meta tags

MSAENV272B Participate in environmentally sustainable work practices

MSAPMSUP390A Use structured problem solving tools

MSS402001A Apply competitive systems and practices

MSS402002A Sustain process improvements

MSS402010A Manage the impact of change on own work

MSS402030A Apply cost factors to work practices

MSS402040A Apply 5S procedures

MSS402080A Undertake root cause analysis

*Note the following prerequisite unit requirements:

Unit in this qualification	Prerequisite unit
ICPPRN387 Use colour	ICPPRN284 Use colour management systems

management for production	
ICPPRN495 Set up and use complex colour management for production	ICPPRN387 Use colour management for production
ICPPRP311 Develop a detailed design concept	ICPPRP211 Develop a basic design concept
ICPPRP321 Produce a typographic image	ICPPRP221 Select and apply type
ICPPRP324 Create pages using a page layout application	ICPPRP224 Produce pages using a page layout application
ICPPRP396 Generate high-end PDF files	ICPPRP284 Produce PDF files for online or screen display
ICPPRP411 Undertake a complex design brief	ICPPRP311 Develop a detailed design concept
ICPPRP421 Compose and evaluate typography	ICPPRP221 Select and apply type
ICPPRP452 Output complex images direct to plate or press	ICPPRP352 Output complex images

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICP31415 Certificate III in Print Communications (Release 2)	ICP31415 Certificate III in Print Communications (Release 1)	Updated unit list	Equivalent qualification

Links

Companion Volume Implementation Guides are available from VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICP40115 Certificate IV in Printing and Graphic Arts

Modification History

Release	Comments
Release 2	This version released with ICP Printing and Graphic Arts Training Package Version 2.0. Version created to update unit list
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Qualification Description

This qualification applies to individuals working in the printing and graphic arts industry. They apply solutions to a defined range of problems and analyse and evaluate information from a variety of sources. They may also take responsibility for production flow and provide leadership and guidance to others with some limited responsibility for the output of others.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

Entry Requirements

Nil

Packaging Rules

Total number of units = 10 units

This qualification has no core units.

10 elective units must be selected, of which:

- 4 electives must be selected from Group A
- 4 elective units must be selected from Group B, C, D, E, or F
- the remaining 2 elective units may be selected from the remaining elective units or from any endorsed training package or accredited course at Certificate IV or Diploma level.

Elective units must be relevant to the work environment and the qualification, maintain the integrity of the AQF alignment and contribute to a valid, industry-supported vocational outcome.

Refer to the Companion Volume Implementation Guide for advice about choosing electives to support specialisations in particular sectors of the printing and graphics arts industry.

Elective units

Group A

BSBSUS401 Implement and monitor environmentally sustainable work practices

ICPCBF391 Use electronic monitoring systems (converting and finishing)

ICPKNW322 Develop knowledge of printing and graphic arts industry

ICPPRN491 Use on-press monitoring of print quality

ICPPRN492 Use on-press print control devices

ICPPRN493 Set up and monitor in-line printing operations

ICPSUP216 Inspect quality against required standards

ICPSUP260 Maintain a safe work environment

ICPSUP262 Communicate in the workplace

ICPSUP482 Troubleshoot and optimise materials and machinery

ICPSUP487 Analyse manual handling processes

Group B

Converting, binding and finishing

ICPCBF303 Run and monitor envelope manufacturing machines

ICPCBF341 Set up machine for complex sequenced or multiple folding

ICPCBF343 Set up machine for complex collating or inserting (sheet/section/reel)

ICPCBF391 Use electronic monitoring systems (converting and finishing)

ICPCBF392 Produce product on window gluer

ICPCBF393 Set up machine for envelope manufacture

ICPCBF395 Set up and operate folder gluer machine

ICPCBF396 Set up in-line scoring, folding and gluing machine for envelope

ICPCBF406 Set up and load in-line smart card machine

ICPCBF407 Operate a smart card machine and pack product

ICPCBF465 Set up and produce hand-bound book

ICPCBF467 Restore books

TLIA2041A Manually sort mail and parcels

Group C

Digital media technologies

CUAANM302 Create 3D digital animations

CUAANM303 Create 3D digital models

CUAANM401* Create advanced 3D digital models

CUACMP301 Implement copyright arrangements

CUADIG304 Create visual design components

CUADIG401 Author interactive media

CUADIG403 Create user interfaces

CUADIG501 Coordinate the testing of interactive media products

CUADIG503 Design e-learning resources

CUADIG504 Design games

CUADIG505 Design information architecture

ICPDMT263 Access and use the Internet

ICPDMT321 Capture a digital image

ICPDMT322 Edit a digital image

ICPDMT491* Create an extensible document

ICPDMT492* Create an extensible style sheet

ICTDBS504 Integrate database with a website

ICTNWK414 Create a common gateway interface script

ICTWEB409 Develop cascading style sheets

ICTWEB419 Develop guidelines for uploading information to a website

ICTWEB429 Create a simple markup language document to specification

ICTWEB502 Create dynamic web pages

ICTWEB510 Analyse information and assign meta tags

Group D

Printing

ICPPRN284 Use colour management systems

ICPPRN382 Produce and manage complex digital print

ICPPRN384 Set up and produce basic digital print

ICPPRN385 Apply software applications to digital production

ICPPRN387* Use colour management for production

ICPPRN411 Mount and proof flexographic plates for complex printing

ICPPRN413 Set up for complex flexographic printing

ICPPRN414 Produce specialist flexographic printed product

ICPPRN421 Set up for complex gravure printing

ICPPRN422 Produce specialist gravure printed product

ICPPRN431 Set up for complex lithographic printing

ICPPRN432 Produce specialist lithographic printed product

ICPPRN441 Set up for complex pad printing

ICPPRN442 Produce specialist pad printed product

ICPPRN451 Set up for complex relief printing

ICPPRN452 Produce specialist relief printed product

ICPPRN471 Set up for complex coating

ICPPRN472 Produce complex coated product

ICPPRN484 Prepare for variable data printing

ICPPRN491 Use on-press monitoring of print quality

ICPPRN492 Use on-press print control devices

ICPPRN493 Set up and monitor in-line printing operations

ICPPRN494* Apply advanced software applications to digital production

ICPPRN495* Set up and use complex colour management for production

ICPPRN496* Set up and produce complex digital print

ICPPRN513 Set up for specialist flexographic printing

ICPPRN521 Set up for specialist gravure printing

ICPPRN531 Set up for specialist lithographic printing

ICPPRN541 Set up for specialist pad printing

ICPPRN551 Set up for specialist relief printing

Group E

Pre-press

ICPPRP211 Develop a basic design concept

ICPPRP221 Select and apply type

ICPPRP224 Produce pages using a page layout application

ICPPRP225 Produce graphics using a graphics application

ICPPRP252 Output images

ICPPRP284 Produce PDF files for online or screen display
ICPPRP311* Develop a detailed design concept
ICPPRP334 Prepare an imposition format for printing processes
ICPPRP352 Output complex images
ICPPRP385 Operate a database for digital printing
ICPPRP396* Generate high-end PDF files
ICPPRP411* Undertake a complex design brief
ICPPRP421* Compose and evaluate typography
ICPPRP422 Digitise complex images for reproduction
ICPPRP430 Manage colour
ICPPRP435 Generate complex imposition
ICPPRP452* Output complex images direct to plate or press
ICPPRP484 Set up and operate automated workflow
ICPPRP485* Develop a digital data template
ICPPRP494* Develop document content and structure

Group F

Support

AUMAQA001 Apply quality assurance techniques
BSBCUS401 Coordinate implementation of customer service strategies
BSBINN301 Promote innovation in a team environment
BSBIPR601 Develop and implement strategies for intellectual property management
BSBLDR403 Lead team effectiveness
BSBMGT402 Implement operational plan
BSBMGT403 Implement continuous improvement
BSBMKG413 Promote products and services
BSBPRO401 Develop product knowledge
BSBREL401 Establish networks
BSBREL402 Build client relationships and business networks
BSBSLS407 Identify and plan sales prospects
BSBSLS408 Present, secure and support sales solutions
BSBSUS501 Develop workplace policy and procedures for sustainability
BSBWOR404 Develop work priorities
BSBWOR501 Manage personal work priorities and professional development

ICPSUP202 Prepare, load and unload product on and off machine
 ICPSUP203 Prepare and maintain the work area
 ICPSUP216 Inspect quality against required standards
 ICPSUP243 Reconcile process outputs
 ICPSUP282 Undertake basic machine maintenance
 ICPSUP342 Undertake inventory procedures
 ICPSUP345 Purchase materials and schedule deliveries
 ICPSUP351 Undertake basic production scheduling
 ICPSUP352 Plan operational processes
 ICPSUP357 Apply quick changeover procedures
 ICPSUP389 Undertake basic root cause analysis
 ICPSUP455 Supervise and schedule work of others
 ICPSUP456 Control production
 ICPSUP458* Monitor production workflow
 ICPSUP464 Provide customer service and education in the printing industry
 ICPSUP482 Troubleshoot and optimise materials and machinery
 ICPSUP485 Implement a Just-in-Time system
 ICPSUP486 Mistake proof a production process
 ICPSUP488 Ensure process improvements are sustained
 ICPSUP553 Prepare production costing estimates
 MSS403010A Facilitate change in an organisation implementing competitive systems and practices
 MSS403040A Facilitate and improve implementation of 5S
 MSAENV472B Implement and monitor environmentally sustainable work practices
 MSAPMSUP390A Use structured problem solving tools
 TAEASS402A Assess competence
 TAEDEL402A Plan, organise and facilitate learning in the workplace

*Note the following prerequisite unit requirements:

Unit in this qualification	Prerequisite unit
CUAANM401 Create advanced 3D digital models	CUAANM303 Create 3D digital models
ICPDMT491 Create an	ICTWEB429 Create a markup language document to

extensible document	specification
ICPDMT492 Create an extensible style sheet	ICTWEB429 Create a markup language document to specification
ICPPRP311 Develop a detailed design concept	ICPPRP211 Develop a basic design concept
ICPPRP396 Generate high-end PDF files	ICPPRP284 Produce PDF files for online or screen display
ICPPRP411 Undertake a complex design brief	ICPPRP311 Develop a detailed design concept
ICPPRP421 Compose and evaluate typography	ICPPRP221 Select and apply type
ICPPRP452 Output complex images direct to plate or press	ICPPRP352 Output complex images
ICPPRP485 Develop a digital data template	ICPPRP385 Operate a database for digital printing
ICPPRP494 Develop document content and structure	ICPPRP396 Generate high-end PDF files
ICPPRN387 Use colour management for production	ICPPRN284 Use colour management systems
ICPPRN494 Apply advanced software applications to digital production	ICPPRN385 Apply software applications to digital production
ICPPRN495 Set up and use complex colour management for production	ICPPRN387 Use colour management for production
ICPPRN496 Set up and produce complex digital print	ICPPRN384 Set up and produce basic digital print
ICPSUP458 Monitor production workflow	ICPSUP216 Inspect quality against required standards

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICP40115 Certificate IV in Printing and Graphic Arts Release 2	ICP40115 Certificate IV in Printing and Graphic Arts Release 1	Updated unit list	Equivalent qualification

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICP40515 Certificate IV in Printing and Graphic Arts (Mail House)

Modification History

Release	Comments
Release 2	This version released with ICP Printing and Graphic Arts Training Package Version 2.0. Version created to update unit list
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Qualification Description

This qualification applies to individuals engaged in production coordination, scheduling and supervising in the mail house sector. They apply solutions to a defined range of problems, and analyse and evaluate information from a variety of sources. They may provide leadership and guidance to others with some limited responsibility for the output of others.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

Entry Requirements

Nil

Packaging Rules

Total number of units = 25 units

4 core units, plus

21 elective units of which:

- 7 elective units must be from Group A
- 2 elective units must be from Group A or Group B
- 4 elective units must be from Group B
- 4 elective units must be from Group C

- the remaining 4 elective units may be selected from the remaining elective units, from other qualifications in this training package or any other endorsed training package, or from an accredited course at Certificate IV or Diploma level.

Elective units must be relevant to the work environment and the qualification, maintain the integrity of the AQF alignment and contribute to a valid, industry-supported vocational outcome.

Core units

BSBSUS401 Implement and monitor environmentally sustainable work practices

ICPSUP216 Inspect quality against required standards

ICPSUP260 Maintain a safe work environment

ICPSUP262 Communicate in the workplace

Elective units

Group A

BSBCUS401 Coordinate implementation of customer service strategies

ICPCBF391 Use electronic monitoring systems (converting and finishing)

ICPKNW322 Develop knowledge of printing and graphic arts industry

ICPSUP202 Prepare, load and unload product on and off machine

ICPSUP203 Prepare and maintain the work area

ICPSUP243 Reconcile process outputs

ICPSUP282 Undertake basic machine maintenance

ICPSUP458* Monitor production workflow

ICPSUP482 Troubleshoot and optimise materials and machinery

ICPSUP487 Analyse manual handling processes

TLIA2041A Manually sort mail and parcels

Group B

BSBMGT402 Implement operational plan

BSBMGT403 Implement continuous improvement

BSBLDR403 Lead team effectiveness

BSBWOR404 Develop work priorities

ICPSUP464 Provide customer service and education

ICPSUP482 Troubleshoot and optimise materials and machinery

ICPSUP485 Implement a Just-in-Time system

TAEASS402A Assess competence

TAEDEL402A Plan, organise and facilitate learning in the workplace

Group C

BSBINN301 Promote innovation in a team environment

ICPCBF303 Run and monitor envelope manufacturing machines

ICPCBF341 Set up machine for complex sequenced or multiple folding

ICPCBF343 Set up machine for complex collating or inserting (sheet/section/reel)

ICPCBF391 Use electronic monitoring systems (converting and finishing)

ICPCBF392 Produce product on window gluer

ICPCBF393 Set up machine for envelope manufacture

ICPCBF395 Set up and operate folder gluer machine

ICPCBF396 Set up in-line scoring, folding and gluing machine for envelope manufacture

ICPCBF406 Set up and load in-line smart card machine

ICPPRP385 Operate a database for digital printing

ICPPRN382 Produce and manage complex digital print

ICPPRN384 Set up and produce basic digital print

ICPPRN496* Set up and produce complex digital print

ICPSUP342 Undertake inventory procedures

ICPSUP351 Undertake basic production scheduling

ICPSUP352 Plan operational processes

ICPSUP357 Apply quick changeover procedures

ICPSUP389 Undertake basic root cause analysis

MSS403010A Facilitate change in an organisation implementing competitive systems and practices

MSS403040A Facilitate and improve implementation of 5S

MSAENV472B Implement and monitor environmentally sustainable work practices

MSAPMSUP390A Use structured problem solving tools

*Note the following prerequisite unit requirements:

Unit in this qualification	Prerequisite unit
ICPPRN496 Set up and	ICPPRN384 Set up and produce basic digital print

produce complex digital print	
ICPSUP458 Monitor production workflow	ICPSUP216 Inspect quality against required standards

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICP40515 Certificate IV in Printing and Graphic Arts (Mail House) Release 2	ICP40515 Certificate IV in Printing and Graphic Arts (Mail House) Release 1	Updated unit list	Equivalent qualification

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICP40815 Certificate IV in ePublishing

Modification History

Release	Comments
Release 2	This version released with ICP Printing & Graphic Arts Training Package Version 2.0. Version created to update unit list
Release 1	This Qualification first released with ICP Printing & Graphic Arts Training Package Version 1.0.

Qualification Description

This qualification reflects the role of individuals working with digital content for publication across one or more platforms. They have broad technical and theoretical knowledge of digital publication processes and need to analyse, compare and act on information from a range of sources to complete specialised tasks. Individuals take responsibility for their own outputs and may have limited responsibility for the organisation of others.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

Entry Requirements

Nil

Packaging Rules

Total number of units = 14

8 core units plus

6 elective units of which:

- 4 elective units must be from the list below
- the remaining 2 elective units may be selected from the elective units list below, from other qualifications in this training package or any other endorsed training package, or from an accredited course at Certificate III or above.

Elective units must be relevant to the work environment and the qualification, maintain the integrity of the AQF alignment and contribute to a valid, industry-supported vocational outcome.

Core units

BSBIPR401 Use and protect copyright

BSBSMB412 Introduce cloud computing into business operations

BSBSUS401 Implement and monitor environmentally sustainable work practices

CUAPHI513 Employ colour management in a digital imaging workplace

ICPPRN497 Work with digital information

ICPPRN498 Adapt digital content for publication on different devices

ICPPRN494 Apply advanced software applications to digital production

ICTNWK303 Configure and administer a network operating system

Elective units

BSBCRT301 Develop and extend critical and creative thinking skills

BSBDES301 Explore the use of colour

BSBDES302 Explore and apply the creative design process to 2D forms

BSBDES303 Explore and apply the creative design process to 3D forms

BSBDES305 Source and apply information on the history and theory of design

BSBDES401 Generate design solutions

BSBDES402 Interpret and respond to a design brief

BSBDES403 Develop and extend design skills and practice

BSBEBU501 Investigate and design e-business solutions

BSBEBU502 Implement e-business solutions

BSBMGT407 Apply digital solutions to work processes

BSBMGT519 Incorporate digital solutions into plans and practices

BSBMKG412 Conduct e-marketing communications

CUAACD401 Integrate colour theory and design processes

CUAPPR401 Realise a creative project

CUAGRD301 Prepare files for publication

CUAGRD302 Use typography techniques

CUAGRD401 Research and apply graphic design techniques

CUAGRD504 Create and manipulate graphics
CUAGRD505 Design and manipulate complex layouts
CUADIG301 Prepare video assets
CUADIG302 Author interactive sequences
CUADIG304 Create visual design components
CUADIG401 Author interactive media
CUADIG402 Design user interfaces
CUADIG403 Create user interfaces
CUADIG404 Apply scripting language in authoring
CUADIG405 Produce innovative digital images
CUAPHI514 Prepare digital images for pre-press processing
ICTNWK301 Provide network systems administration
ICTNWK302 Determine and action network problems
ICTNWK304 Administer network peripherals
ICTNWK305 Install and manage network protocols
ICTNWK401 Install and manage a server
ICTNWK402 Install and configure virtual machines for sustainable ICT
ICTNWK403 Manage network and data integrity
ICTNWK404 Install, operate and troubleshoot a small enterprise branch network
ICTNWK405 Build a small wireless local area network
ICTNWK406 Install, configure and test network security
ICTNWK407 Install and configure client-server applications and services
ICTNWK408 Configure a desktop environment
ICTNWK409 Create scripts for networking
ICTNWK410 Install hardware to a network
ICTNWK411 Deploy software to networked computers
ICTNWK412 Create network documentation
ICTNWK414 Create a common gateway interface script
ICTNWK416 Build security into virtual private networks
ICTNWK417 Build an enterprise wireless network
ICTNWK418 Implement backbone technologies in a local area network
ICPPRP324 Create pages using a page layout application
ICPPRP325 Create graphics using a graphics application
ICPPRP385 Operate a database for digital printing

ICPPRP421 Compose and evaluate typography

ICPPRP422 Digitise complex images for reproduction

ICPPRP430 Manage colour

ICPPRP435 Generate complex imposition

ICPPRP484 Set up and operate automated workflow

ICPPRN496 Set up and produce complex digital print

ICTWEB401 Design a website to meet technical requirements

ICTWEB402 Confirm accessibility of websites for people with special needs

ICTWEB403 Transfer content to a website using commercial packages

ICTWEB404 Maintain website performance

ICTWEB405 Monitor traffic and compile website traffic reports

ICTWEB406 Create website testing procedures

ICTWEB407 Conduct operational acceptance tests of websites

ICTWEB408 Ensure basic website security

ICTWEB409 Develop cascading style sheets

ICTWEB410 Apply web authoring tool to convert client data for websites

ICTWEB411 Produce basic client-side script for dynamic web pages

ICTWEB412 Produce interactive web animation

ICTWEB413 Optimise search engines

ICTWEB414 Design simple web page layouts

ICTWEB415 Produce server-side script for dynamic web pages

ICTWEB416 Customise content management system

ICTWEB417 Integrate social web technologies

ICTWEB418 Use development software and ICT tools to build a basic website

ICTWEB419 Develop guidelines for uploading information to a website

ICTWEB420 Write content for web pages

ICTWEB421 Ensure website content meets technical protocols and standards

ICTWEB422 Ensure website access and useability

ICTWEB423 Ensure dynamic website security

ICTWEB424 Evaluate and select a web hosting service

ICTWEB425 Apply structured query language to extract and manipulate data

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICP40815 Certificate IV in ePublishing Release 2	ICP40815 Certificate IV in ePublishing Release 1	Updated unit list	Equivalent qualification

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICP50115 Diploma of Printing and Graphic Arts

Modification History

Release	Comments
Release 3	This version was released with ICP Printing and Graphic Arts Training Package Version 3.0. Updates to elective unit list.
Release 2	This version released with ICP Printing and Graphic Arts Training Package Version 2.0. Version created to update unit list.
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Qualification Description

This qualification applies to individuals who possess a sound theoretical knowledge in the printing and graphic arts industry and are responsible for production workflow.

They analyse and evaluate information from a variety of sources and are involved in planning, scheduling and the supervision of labour, machines, and materials for production. They provide leadership and guidance to others with responsibility for the output of others.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

Entry Requirements

Nil

Packaging Rules

Total number of units = 20 units

4 core units, plus

16 elective units of which:

- 13 elective units must be from Groups A, B, C, D, E or F

- the remaining 3 elective units may be selected from the remaining elective units or from any endorsed training package or accredited course at Certificate IV level or higher.

Elective units must be relevant to the work environment and the qualification, maintain the integrity of the AQF alignment and contribute to a valid, industry-supported vocational outcome.

Refer to the Companion Volume Implementation Guide for advice about choosing electives to support specialisations in particular sectors of the printing and graphics arts industry.

Core units

BSBSUS501 Develop workplace policy and procedures for sustainability

ICPSUP216 Inspect quality against required standards

ICPSUP260 Maintain a safe work environment

ICPSUP262 Communicate in the workplace

Elective units

Group A

Converting, binding and finishing

ICPCBF381 Set up machine for complex laminating

ICPCBF382 Produce complex laminated product

ICPCBF391 Use electronic monitoring systems (converting and finishing)

Group B

Digital media technologies

CUAANM302 Create 3D digital animations

CUAANM401* Create advanced 3D digital animations

CUAANM403 Create titles for screen productions

CUAANM503 Design animation and digital visual effects

CUACMP301 Implement copyright arrangements

CUADIG302 Author interactive sequences

CUADIG401 Author interactive media

CUADIG502 Design web environments

CUADIG503 Design e-learning resources

CUADIG504 Design games

CUADIG505 Design information architecture
ICPDMT491* Create an extensible document
ICPDMT492* Create an extensible style sheet
ICPDMT581 Manage multimedia production
ICPDMT582 Manage multimedia projects
ICTDBS504 Integrate database with a website
ICTWEB429 Create a markup language document to specification
ICTWEB510 Analyse information and assign meta tags

Group C

Pre-press

ICPPRP284 Produce PDF files for online or screen display
ICPPRP322 Digitise images for reproduction
ICPPRP334 Prepare an imposition format for printing processes
ICPPRP352 Output complex images
ICPPRP370 Make multiple image plates
ICPPRP385 Operate a database for digital printing
ICPPRP396* Generate high-end PDF files
ICPPRP397 Transfer digital files
ICPPRP422 Digitise complex images for reproduction
ICPPRP430 Manage colour
ICPPRP435 Generate complex imposition
ICPPRP452* Output complex images direct to plate or press
ICPPRP484 Set up and operate automated workflow
ICPPRP485* Develop a digital data template
ICPPRP494* Develop document content and structure

Group D

Printing

ICPPRN382 Produce and manage complex digital print
ICPPRN383 Prepare for personalised digital printing
ICPPRN384 Set up and produce basic digital print
ICPPRN414 Produce specialist flexographic printed product
ICPPRN422 Produce specialist gravure printed product

ICPPRN432 Produce specialist lithographic printed product

ICPPRN442 Produce specialist pad printed product

ICPPRN452 Produce specialist relief printed product

ICPPRN471 Set up for complex coating

ICPPRN472 Produce complex coated product

ICPPRN484 Prepare for variable data printing

ICPPRN491 Use on-press monitoring of print quality

ICPPRN492 Use on-press print control devices

ICPPRN493 Set up and monitor in-line printing operations

ICPPRN496* Set up and produce complex digital print

ICPPRN513 Set up for specialist flexographic printing

ICPPRN521 Set up for specialist gravure printing

ICPPRN531 Set up for specialist lithographic printing

ICPPRN541 Set up for specialist pad printing

ICPPRN551 Set up for specialist relief printing

ICPPRN552 Manage digital production workflow

Group E

Screen printing

ICPSCP351 Prepare machine and drying/curing unit

ICPSCP374 Operate a semi-automatic screen printing machine

ICPSCP382 Produce computer image for screen printing

Group F

Support

BSBCUS401 Coordinate implementation of customer service strategies

BSBCUS501 Manage quality customer service

BSBDES601 Manage design realisation

BSBLDR403 Lead team effectiveness

BSBMGT402 Implement operational plan

BSBMGT403 Implement continuous improvement

BSBMGT517 Manage operational plan

BSBMGT516 Facilitate continuous improvement

BSBMGT608 Manage innovation and continuous improvement

BSBMKG401 Profile the market

BSBMKG413 Promote products and services

BSBMKG501 Identify and evaluate marketing opportunities

BSBPMG409 Apply project scope management techniques

BSBREL401 Establish networks

BSBREL402 Build client relationships and business networks

BSBSLS501 Develop a sales plan

BSBSMB402 Plan small business finances

BSBSMB403 Market the small business

BSBSMB404 Undertake small business planning

BSBWOR404 Develop work priorities

BSBWOR501 Manage personal work priorities and professional development

BSBWOR502 Lead and manage team effectiveness

ICPKNW322 Develop knowledge of printing and graphic arts industry

ICPSUP216 Inspect quality against required standards

ICPSUP351 Undertake basic production scheduling

ICPSUP455 Supervise and schedule work of others

ICPSUP458* Monitor production workflow

ICPSUP464 Provide customer service and education

ICPSUP485 Implement a Just-in-Time system

ICPSUP487 Analyse manual handling processes

ICPSUP488 Ensure process improvements are sustained

ICPSUP516 Set and apply quality standards

ICPSUP553 Prepare production costing estimates

ICPSUP554 Manage teams

ICPSUP561 Implement and monitor WHS

ICPSUP583 Troubleshoot and optimise production processes

ICPSUP684 Determine and improve process capability

MSS403010A Facilitate change in an organisation implementing competitive systems and practices

MSS403040A Facilitate and improve implementation of 5S

MSS405021A Develop a Just in Time system

MSAENV472B Implement and monitor environmentally sustainable work practices

MSAPMSUP390A Use structured problem solving tools

SIRXCCS006A Maintain business to business relationships

TAEASS402A Assess competence

TAEDEL402A Plan, organise and facilitate learning in the workplace

* Note the following prerequisite unit requirements:

Unit in this qualification	Prerequisite unit
CUAANM401 Create advanced 3D digital models	CUAANM303 Create 3D digital models
ICPDMT491 Create an extensible document	ICTWEB429 Create a markup language document to specification
ICPDMT492 Create an extensible style sheet	ICTWEB429 Create a markup language document to specification
ICPPRP396 Generate high-end PDF files	ICPPRP284 Produce PDF files for online or screen display
ICPPRP452 Output complex images direct to plate or press	ICPPRP352 Output complex images
ICPPRP485 Develop a digital data template	ICPPRP385 Operate a database for digital printing
ICPPRP494 Develop document content and structure	ICPPRP396 Generate high-end PDF files
ICPPRN496 Set up and produce complex digital print	ICPPRN384 Set up and produce basic digital print
ICPSUP458 Monitor production workflow	ICPSUP216 Inspect quality against required standards

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICP50115 Diploma of Printing and Graphic Arts (Release 3)	ICP50115 Diploma of Printing and Graphic Arts (Release 2)	Updated unit list	Equivalent qualification

Links

Companion Volume Implementation Guides are available from VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

BSBDES403 Develop and extend design skills and practice

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to develop and extend skills as a practising designer.

It applies to individuals who work as a designer, in any industry context, either independently or employed by an organisation.

Designers must continually refine, develop and evaluate their own conceptual and technical skills. Research, experimentation and collaboration are key factors in this process.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Design – Design Process

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Acquire and develop technical skills	1.1 Plan strategies to ensure the development of appropriate technical skills in design practice 1.2 Plan and use opportunities to develop and assess technical skills 1.3 Identify and use practice, feedback, discussion and evaluation

ELEMENT	PERFORMANCE CRITERIA
	opportunities to continuously improve technical skills 1.4 Develop and extend technical skills through testing capabilities of materials, tools and equipment 1.5 Identify and use relevant media to stimulate technical and professional development
2 Develop conceptual skills and ideas	2.1 Engage in ongoing experimentation and exploration of different ideas and techniques 2.2 Discuss ideas with others and apply knowledge gained to inform own work 2.3 Use work practice to gain experience in a range of genres and interpretations 2.4 Study the work of others to stimulate conceptual and technical skills development 2.5 Research and share ideas across a range of design disciplines 2.6 Identify and use a range of opportunities to develop own skills and keep informed about current design practice
3 Develop own voice	3.1 Explore and experiment with new ideas in making and/or interpreting design work 3.2 Explore and use technology, where appropriate, to develop own voice and expand practice 3.3 Demonstrate own voice through design project realisation implementation
4 Evaluate own work	4.1 Seek and apply constructive criticism from others to improve own work 4.2 Evaluate own work against planned strategy for own practice 4.3 Evaluate own work in the context of work by others to extend own practice 4.4 Adjust work processes and practice as necessary to improve technical, conceptual and commercial outcomes
5 Research work opportunities	5.1 Correctly identify sources of information relating to work opportunities for designers 5.2 Identify networks and promotional opportunities for designers which may be helpful in developing career opportunities 5.3 Incorporate research results and information into own work and career planning

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	1.1-1.5, 2.2, 2.4, 2.6, 3.2, 4.1-4.3	Uses practical strategies to identify and implement improvements in own creative skills and technical design skills and practice
Reading	1.5, 2.4, 2.5, 5.1-5.3	Researches and evaluates a variety of textual information from a wide range of sources
Writing	2.5, 4.1, 5.3	Uses clear and specific language to document ideas, feedback and research results
Oral Communication	1.3, 2.2, 2.5, 4.1	- Participates in a range of verbal exchanges and presentations using appropriate tone and vocabulary to suit the audience - Uses active listening and questioning techniques to clarify and confirm understanding
Navigate the world of work	1.2, 1.3, 2.3, 4.1, 5.2	- Recognises the importance of developing technical skills and of learning from feedback and self-reflection - Begins to broaden areas of interest and focus, seeking new challenges and recognising that expertise can be adapted and applied in diverse contexts
Interact with others	2.5, 4.1, 5.2	Begins to cultivate relationships with people with the knowledge, skills and influence to provide collaborative support
Get the work done	1.1, 1.2, 1.4, 1.5, 2.1, 2.3, 2.6, 3.1-3.3, 4.2, 4.4, 5.1	- Takes responsibility for planning and implementing tasks required to achieve outcomes, including those times when interaction with others is - Systematically analyses and evaluates information to aid in decision making and problem solving - Applies some basic principles of lateral thinking to generate new or innovative ideas - Recognises the potential of new approaches to enhance work practices and outcomes - Evaluates effectiveness of decisions on how well they meet stated goals - Understands key principles and concepts underpinning the design and operation of digital systems and applies these when seeking to understand the potential of new technology

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBDES403 Develop and extend design skills and practice	BSBDES403A Develop and extend design skills and practice	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBDES403 Develop and extend design skills and practice

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use strategies to develop or extend skills, ideas and a unique voice
- adjust work processes as a result of peer feedback and self-evaluation
- research work options, networking and promotional opportunities and incorporate information into own work and career development.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list current and emerging designers in the relevant design discipline
- discuss current and emerging trends and technologies in the relevant design discipline, and the opportunities and challenges they represent
- identify professional development information and resources available to designers
- summarise sources of information relating to work opportunities and career planning.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the design process field of work and include access to materials, resources and equipment used in the development of technical and conceptual skills in the relevant design context.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSUS401 Implement and monitor environmentally sustainable work practices

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 2.0. Version created to better align unit to AQF level.

Application

This unit describes the skills and knowledge required to effectively analyse the workplace in relation to environmentally sustainable work practices and to implement improvements and monitor their effectiveness.

It applies to individuals with responsibility for a specific area of work or who lead a work group or team and addresses the knowledge, processes and techniques necessary to implement and monitor environmentally sustainable work practices, including the development of processes and tools.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Industry Capability – Sustainability

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Investigate current practices in relation to resource usage	1.1 Identify environmental regulations applying to the enterprise 1.2 Analyse procedures for assessing compliance with

ELEMENT	PERFORMANCE CRITERIA
	environmental/sustainability regulations 1.3 Collect information on environmental and resource efficiency systems and procedures, and provide to the work group where appropriate 1.4 Collect, analyse and organise information from a range of sources to provide information/advice and tools/resources for improvement opportunities 1.5 Measure and document current resource usage of members of the work group 1.6 Analyse and document current purchasing strategies 1.7 Analyse current work processes to access information and data to assist in identifying areas for improvement
2. Set targets for improvements	2.1 Seek input from stakeholders, key personnel and specialists 2.2 Access external sources of information and data as required 2.3 Evaluate alternative solutions to workplace environmental issues 2.4 Set efficiency targets
3. Implement performance improvement strategies	3.1 Source and use appropriate techniques and tools to assist in achieving efficiency targets 3.2 Apply continuous improvement strategies to own work area of responsibility, including ideas and possible solutions to communicate to the work group and management 3.3 Implement and integrate environmental and resource efficiency improvement plans for own work group with other operational activities 3.4 Supervise and support team members to identify possible areas for improved practices and resource efficiency in work area 3.5 Seek suggestions and ideas about environmental and resource efficiency management from stakeholders and act upon where appropriate 3.6 Implement costing strategies to fully utilise environmental assets
4. Monitor performance	4.1 Use and/or develop evaluation and monitoring, tools and technology 4.2 Document and communicate outcomes to report on efficiency targets to key personnel and stakeholders 4.3 Evaluate strategies and improvement plans 4.4 Set new efficiency targets, and investigate and apply new tools

ELEMENT	PERFORMANCE CRITERIA
	and strategies 4.5 Promote successful strategies and reward participants where possible

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.4, 1.6, 1.7, 2.3, 3.1	- Identifies and analyses complex texts to determine legislative, regulatory and business requirements - Reviews reported information to evaluate workplace strategies and improvement practices
Writing	1.5, 1.6, 2.1, 2.2, 2.4, 3.1-3.3, 4.4, 4.5	- Documents findings of investigations from written and oral sources according to organisational requirements - Provides updates about progress using formats and language appropriate to the audience and context
Oral Communication	2.1, 2.2, 3.3-3.5, 4.4, 4.5	- Presents information and seeks advice using structure and language appropriate to audience - Participates in discussions using listening and questioning to elicit the views of others and to clarify or confirm understanding
Numeracy	1.5, 2.4, 3.1, 3.6, 4.4	Analyses numerical information to measure usage and calculates metric measurements, quantities/ratios and financial data using appropriate tools
Navigate the world of work	1.1, 1.2	Recognises and follows legislative requirements and organisational policies and procedures associated with own role
Interact with others	1.3, 2.1, 2.2, 3.3-3.5, 4.2, 4.4, 4.5	- Selects and uses appropriate conventions and protocols when communicating with internal and external stakeholders to seek or share information - Collaborates and consults with a range of stakeholders to achieve shared understanding of individual roles in meeting objectives
Get the work done	1.2, 1.4-1.7, 2.3, 2.4, 3.1, 3.2, 3.3, 3.5, 3.6, 4.1, 4.3, 4.4	- Develops plans to manage routine and non-routine tasks for own work group with an awareness of how they contribute to the broader organisation - Uses systematic, analytical processes to set

		environmental targets, gather relevant information, identify and evaluate alternative approaches • Evaluates outcomes of decisions to identify opportunities for improvement • Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSUS401 Implement and monitor environmentally sustainable work practices	BSBSUS301 Implement and monitor environmentally sustainable work practices	Recoded to meet AQF standards	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSUS401 Implement and monitor environmentally sustainable work practices

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 2.0. Version created to better align unit to AQF level.

Performance Evidence

Evidence of the ability to:

- analyse information from a range of sources to identify current procedures, practices and compliance requirements in relation to environmental and resource sustainability
- consult and communicate with relevant stakeholders to seek input and encourage engagement with developing and implementing sustainability improvements, encourage feedback and suggestions and report on outcomes
- plan and organise work group activities to:
 - measure current resource usage
 - solve problems and generate ideas for improvements
 - evaluate and implement strategies to improve resource usage
 - plan, implement and integrate improvements into operations
 - meet environmental requirements
- apply continuous improvement approach to sustainability performance
- apply change management techniques to support sustainability performance.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify relevant internal and external sources of information and explain how they can be used to identify sustainability improvements

- explain the compliance requirements for the work area with reference to legislation, regulations, codes of practice and workplace procedures that relate to environmental and resource issues
- outline common environmental and energy efficiency issues within the industry
- give examples of benchmarks for environmental and resource sustainability that are relevant to the organisation
- outline organisational systems and procedures that relate to environmental and resource sustainability improvements including:
 - supply chain, procurement and purchasing
 - quality assurance
 - making recommendations and seeking approvals

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the sustainability field of work and include access to:

- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies or, where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

CUAACD101 Use basic drawing techniques

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to create a basic visual representation of objects or ideas. It does not relate to drawing as an art form.

It applies to individuals in any context where a basic sketch or drawing of objects, ideas or layouts is required.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual communication – art, craft and design

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for drawing	1.1 Clarify purpose of drawings with appropriate people 1.2 Identify tools and materials required for basic drawing techniques 1.3 Select appropriate tools and materials for basic drawing techniques
2. Produce basic drawings	2.1 Apply a limited range of techniques to represent objects or ideas 2.2 Follow safety instructions when handling tools and materials 2.3 Seek feedback on drawings from relevant people and refine

ELEMENT	PERFORMANCE CRITERIA
	drawings as required

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.2	Comprehends safe handling instructions for tools and materials
Oral Communication	1.1, 2.3	Uses questioning and active listening techniques to confirm task purpose and seek feedback
Navigate the world of work	2.2	Follows defined safety procedures when handling tools and materials
Get the work done	1.1, 1.2, 1.3, 2.1, 2.2, 2.3	Decides on tools, materials and techniques required to complete tasks, with the assistance of others

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAACD101 Use basic drawing techniques	CUVACD101A Use basic drawing techniques	Updated to meet Standards for Training Packages and clarify intent.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAACD101 Use basic drawing techniques

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- identify tools, materials and techniques required to produce drawings
- use a range of basic drawing techniques to produce and refine drawings that represent objects or ideas.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list materials and tools commonly used for drawing and explain how to use them safely
- describe different types of drawing techniques.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to materials and tools used in drawing work.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAACD201 Develop drawing skills to communicate ideas

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to develop simple drawing techniques to communicate ideas. It does not relate to drawing as an art form.

It applies to individuals who use drawing to visually represent ideas about objects, the use of space, narratives or the steps in a process.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual communication – art, craft and design

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to use a range of drawing techniques	1.1 Clarify purpose of drawings with appropriate people 1.2 Identify suitable techniques to represent ideas 1.3 Select tools and materials required for selected techniques 1.4 Take presentation context into account when selecting techniques, tools and materials
2. Produce simple drawings	2.1 Explore ways of representing ideas through application of different techniques

ELEMENT	PERFORMANCE CRITERIA
	2.2 Seek feedback from others on different drawing techniques 2.3 Select techniques best suited to represent ideas 2.4 Draw ideas using selected techniques 2.5 Respond positively to feedback from others on own work and take action to improve own skills as required

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	2.5	Identifies and uses feedback as a strategy to improve skills
Oral Communication	1.1, 2.2, 2.5	Uses questioning and active listening to clarify task requirements, and seek and respond to feedback
Interact with others	1.1, 2.2, 2.5	Follows accepted practices and protocols in seeking advice and opinions from others
Get the work done	1.2, 1.3, 1.4, 2.1, 2.3, 2.4	- Plans and undertakes routine drawing tasks in consultation with others - Makes routine decisions using defined circumstances to assist - Manages own decisions about appropriate techniques to represent ideas using experimentation and feedback

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAACD201 Develop drawing skills to communicate ideas	CUVACD201A Develop drawing skills to communicate ideas	Updated to meet Standards for Training Packages and clarify intent.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAACD201 Develop drawing skills to communicate ideas

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- select tools, materials and techniques required to produce drawings
- produce and refine drawings that:
 - demonstrate basic techniques
 - communicate ideas
 - are appropriate for the presentation context.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe the uses of common drawing tools and materials
- describe different approaches to drawing
- explain the importance of drawing techniques in representing ideas.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to equipment and materials used to produce drawings.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAACD401 Integrate colour theory and design processes

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to investigate and combine colour theory and design processes into two-dimensional or three-dimensional work.

It applies to individuals who use design processes in visual communication situations.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual communication – art, craft and design

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Research information on colour theory and design processes	1.1 Identify and access relevant sources of information on colour theory and design processes 1.2 Research historical and contemporary approaches to colour and design in the context of a work project 1.3 Evaluate information to determine how colour theory and design may be integrated into the design process 1.4 Consider intellectual property and other legislative requirements relevant to design processes
2. Communicate ideas	2.1 Experiment with selected materials, tools and equipment to

ELEMENT	PERFORMANCE CRITERIA
through the application of colour and design theory	determine new ways in which colour theory and design processes may be integrated 2.2 Explore and develop new ideas through a process of experimentation 2.3 Achieve solutions by working with the elements and principles of design and different aspects of colour
3. Evaluate design work	3.1 Reflect on own application of design process and success in communicating concepts 3.2 Identify areas for future improvement, especially in terms of own skill development 3.3 Discuss completed work with others and respond positively to feedback

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	3.2	Identifies own skills gaps
Reading	1.1, 1.2, 1.3	Sources, analyses and interprets a range of visual and textual information to inform design ideas and project solutions
Oral Communication	3.3	Selects and uses appropriate strategies to initiate discussion of work and elicit feedback
Navigate the world of work	1.4	Considers the implications of intellectual property and other legislation requirements when undertaking research and planning design work
Interact with others	3.3	Seeks feedback from others and considers its value in the improvement of future performance
Get the work done	1.1, 1.2, 1.3, 2.1-2.3, 3.1	- Plans and implements research-related tasks - Selects and organises suitable resources to produce design solutions - Tests the capabilities of materials tools and equipment with creative experimentation to discover new ways of

		integrating theory and processes • Develops new ideas using investigative processes and refines them using design principles and elements • Evaluates outcomes of design decisions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAACD401 Integrate colour theory and design processes	CUVACD401A Integrate colour theory and design processes	Updated to meet Standards for Training Packages and clarify intent. Minor edits to performance criteria.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAACD401 Integrate colour theory and design processes

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- research colour theory and the design process and analyse findings
- use practical exploration and experimentation to enhance idea development
- apply colour theory and design processes to communicate ideas in projects
- use strategies to evaluate work outcomes.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain how differences in individual perception and choice within the design process influences final outcomes
- discuss the effects of rigid application of colour theory to design processes and project outcomes
- explain ways in which colour theory and design processes can be explored and combined to meet the needs of a project
- list a range of materials, tools and equipment required for the production of samples that integrate colour theory and design processes
- explain how other artists and designers have applied colour theory and design processes to their work
- summarise intellectual property issues and legislation and their impact on aspects of design.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- tools, materials and equipment used in the design process in the relevant context
- information sources.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAANM301 Create 2D digital animations

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to plan and implement design concepts and use industry animation software to create 2D animations for inclusion in interactive media products, short stand-alone animated sequences and basic games.

It applies to individuals who work in a team environment and report to a senior animator, designer, director or producer.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Animation and Digital Effects

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify animation requirements	1.1 Clarify 2D animation requirements, including design specifications and storyboard in consultation with relevant people 1.2 Clarify target users or audience and requirements with regard to output formats and delivery platforms
2. Generate and assess ideas	2.1 Review animations, artworks and other creative sources that may inspire design ideas 2.2 Generate a range of animation ideas that are technically feasible,

ELEMENT	PERFORMANCE CRITERIA
	respond to specifications and provide creative solutions to all design issues 2.3 Discuss animation ideas with relevant people
3. Plan approach	3.1 Assess the range of 2D animation software to determine compatibility with design specifications 3.2 Select the most appropriate 2D animation software in consultation with relevant people 3.3 Evaluate initial design ideas and discuss with relevant people to select final design concept to meet production requirements and timelines
4. Produce animations	4.1 Apply basic screen, visual design, communication and animation principles and animation techniques to produce animated sequences based on concept 4.2 Use animation software to import or generate sufficient quantity of key frames to establish required actions 4.3 Check copyright conditions on images from external sources 4.4 Combine animated objects to produce single sequences according to creative requirements and specifications 4.5 Integrate audio assets where necessary 4.6 Adopt safe ergonomic practices when using screens and keyboards for long periods of time 4.7 Save and store animations using appropriate output file formats and standard naming conventions
5. Finalise animations	5.1 Review animations to assess creative solutions to design specifications, appropriateness to users or audience and technical feasibility 5.2 Discuss and confirm with relevant people additional requirements or modifications to overall designs or animations and undertake necessary amendments

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance	Description

	Criteria	
Reading	1.1, 2.1-2.3, 3.1, 3.3, 4.3, 4.4, 5.1	- Interprets production documentation and design specifications in relation to own duties - Locates and reviews creative sources that may inspire new ideas
Writing	2.3, 4.1, 4.7, 5.2	- Generates and records information for the design of 2D animations in required format - Uses standard naming conventions and version control protocols when saving and storing files
Oral Communication	1.1, 2.3, 3.2, 3.3, 4.1, 5.2	- Obtains information by listening and questioning - Uses clear language to discuss ideas, contribute information, and express requirements
Navigate the world of work	4.3, 4.6	Complies with legislative requirements relevant to own position
Interact with others	1.1, 2.3, 3.2, 3.3, 4.1, 5.2	- Responds to and draws on others' perspectives when negotiating design of 2D animations - Collaborates to achieve joint outcomes in the design process, playing an active role in facilitating effective group interaction
Get the work done	1.1, 1.2, 2.1-2.3, 3.1-3.3, 4.1, 4.2, 4.4, 4.5, 5.1, 5.2	- Organises and completes animation requirements in line with specifications, arranging consultations at key design points - Takes responsibility for decisions directly related to completion of own tasks - Uses digital software to create drawings and animations and to manage files

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAANM301 Create 2D digital animations	CUFANM301A Create 2D digital animations	Updated to meet Standards for Training Packages. Performance criteria combined and reworded for clarity.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAANM301 Create 2D digital animations

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- interpret design specifications and generate a range of creative ideas and concepts that respond to the brief
- collaborate with others to clarify requirements, discuss ideas, select final design concept and review final animations
- use animation software to create 2D animations that meet requirements of design briefs within production deadlines
- correctly name and store animations in appropriate file formats.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain basic animation techniques and principles
- describe screen, visual design and communication principles as they apply to animations
- outline intellectual property considerations if using images from external sources
- identify work health and safety standards as they apply to using screens and keyboards for extended periods of time.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- production documents and briefs
- resources, equipment and software required for 2D animations

- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAANM302 Create 3D digital animations

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to animate simple 3D models and create 3D animations, which may include audio components. The models are for inclusion in interactive media products, short stand-alone animated sequences and basic games.

It applies to individuals who plan and create 3D animated sequences in consultation with relevant personnel in a wide variety of contexts in the digital content industry.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Animation and Digital Effects

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Clarify animation requirements	1.1 Clarify 3D animation requirements documented in design briefs with relevant personnel 1.2 Examine models to be animated to determine appropriate animation techniques 1.3 Identify file formats and delivery platform for animated sequences 1.4 Identify factors that may influence animation design approach

ELEMENT	PERFORMANCE CRITERIA
	1.5 Clarify work flow sequences with relevant personnel to ensure production schedule deadlines are met
2. Plan approach	2.1 Research animations, artworks and other creative sources that may inspire ideas 2.2 Generate a range of ideas for animations that are technically feasible, respond to briefs and provide creative solutions to all design issues 2.3 Present ideas to relevant personnel using appropriate design techniques 2.4 Adjust approach to incorporate feedback and agree on final design concept 2.5 Discuss and select 3D animation software with relevant personnel to ensure animated sequences meet technical and creative requirements 2.6 Identify audio assets to support animations as required
3. Produce animated sequences for review	3.1 Create 3D animations using software and animation techniques to suit design requirements 3.2 Adopt safe ergonomic practices when using equipment for long periods of time 3.3 Apply basic animation, screen, visual design and communication principles to produce animations 3.4 Apply real world camera techniques to virtual cameras used in 3D animation as required 3.5 Confirm with relevant personnel that models have not infringed copyright 3.6 Render completed animated sequences using appropriate output file formats 3.7 Save and store animated sequences using standard naming conventions and version control protocols 3.8 Demonstrate 3D animated sequences to relevant personnel for evaluation by agreed deadlines
4. Finalise animated sequences	4.1 Review animated sequences to assess creative solutions to design briefs, appropriateness to users or audience, and technical feasibility 4.2 Discuss and confirm additional requirements or modifications with relevant personnel, and complete changes as required for signoff

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 1.5, 2.1, 2.2, 3.5, 4.1	Interprets production documentation and design specifications in relation to own duties and copyright issues
Writing	3.6, 3.7, 4.2	- Generates and records information for the design of 3D animations in required format - Uses standard naming conventions and version control protocols when saving and storing files
Oral Communication	1.1, 1.5, 2.3-2.5, 4.2	- Obtains information by listening and questioning - Uses clear language to discuss ideas, contribute information, and express requirements
Navigate the world of work	3.2, 3.5	Understands and complies with legislative requirements relevant to role
Interact with others	1.1, 1.5, 2.3-2.5, 3.8, 4.2	- Responds to and draws on others' perspectives when negotiating design of 3D animations - Collaborates to achieve joint outcomes in the design process, playing an active role in facilitating effective group interaction
Get the work done	1.1-1.5, 2.1-2.3, 2.5, 2.6, 3.3-3.8, 4.1, 4.2	- Organises and completes animation requirements in line with specifications, arranging consultations at key design points - Takes responsibility for decisions directly related to own tasks - Uses digital software to create drawings and animations and to manage files

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAANM302 Create	CUFANM302A Create 3D digital	Updated to meet Standards for	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
3D digital animations	animations	Training Packages. Performance criteria reworded for clarity.	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAANM302 Create 3D digital animations

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- interpret design specifications and generate a range of creative ideas and concepts that respond to the brief
- collaborate with others to clarify requirements, discuss ideas, select final design concept and review final animations
- use animation software to create 3D animations that meet requirements of design briefs within production deadlines
- correctly name and store animations in appropriate file formats.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain basic animation techniques and principles
- describe screen, visual design and communication principles as they apply to animations
- outline intellectual property considerations if using images from external sources
- outline work health and safety requirements as they apply to using screens and keyboards for extended periods of time.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- production documents and briefs
- resources, equipment and software required for 3D animations

- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAANM303 Create 3D digital models

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to create 3D digital models that meet technical and design specifications.

It applies to individuals who clarify production requirements and produce 3D models under supervision, but may have responsibility for planning their own work. They produce these 3D models primarily for online and mobile device application.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Animation and Digital Effects

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Clarify work requirements	1.1 Clarify requirements and purpose for 3D digital models with reference to production documents 1.2 Clarify workflow sequences in consultation with relevant personnel to ensure production schedule deadlines are met 1.3 Clarify with relevant personnel the modelling technique that suits production requirements 1.4 Discuss and select digital modelling software with relevant personnel that suits production delivery platform and modelling

ELEMENT	PERFORMANCE CRITERIA
	techniques 1.5 Gather and analyse reference materials to help visualise 3D models
2. Develop 3D digital models	2.1 Use software features and apply modelling principles to block out models based on reference materials 2.2 Adopt safe ergonomic practices when using screens and keyboards for extended periods of time 2.3 Use software features and geometry to shape models and apply various effects as required 2.4 Check that models' topology allows appropriate deformation as required 2.5 Refine and check integrity of models progressively until they meet design requirements 2.6 Confirm with relevant personnel that models have not infringed copyright 2.7 Test models to identify faults, and modify as required 2.8 Demonstrate models to relevant personnel for feedback, and make adjustments as required
3 Finalise 3D digital models	3.1 Review 3D models to ensure creative solutions meet design specifications 3.2 Discuss and confirm with relevant personnel additional requirements or modifications to 3D models and undertake necessary amendments 3.3 Render and output models in appropriate format and submit to relevant personnel by agreed deadlines 3.4 Make back-up copies of files, and save and store 3D models using standard naming conventions

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description

Reading	1.1, 1.2, 1.5	Analyses textual information from production documents and reference materials to confirm design requirements
Writing	1.1, 1.2	Uses specific language appropriate to audience to clarify requirements and prepare work-related documentation
Numeracy	2.1, 2.3	Uses knowledge of shapes, symmetry and solids to perform required adjustments to models
Oral Communication	1.1-1.4, 2.6, 2.8, 3.2	- Explains ideas and requirements clearly and listens carefully to verbal instructions - Uses questioning and listening skills to clarify and confirm understanding
Navigate the world of work	2.2, 2.6	Applies legislative requirements relevant to own role
Interact with others	1.1-1.4, 2.6, 2.8, 3.2, 3.3	- Responds to and draws on others' perspectives when negotiating design of 3D digital models - Collaborates to achieve joint outcomes in the design process, playing an active role in facilitating effective group interaction
Get the work done	1.2-1.5, 2.1-2.8, 3.1-3.4	- Plans, organises and implements tasks required to meet requirements within deadlines - Makes aesthetic and technical decisions in collaboration with others - Evaluates requirements and technical criteria to ensure design specifications are achieved - Uses digital software to create models and to manage files

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAANM303 Create 3D digital models	CUFANM303A Create 3D digital models	Updated to meet Standards for Training Packages. Minor edits to elements and performance criteria. Additional element.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAANM303 Create 3D digital models

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- create 3D digital models that meet design requirements and production deadlines
- collaborate with others to clarify requirements, discuss techniques, select modelling software and review models
- use 3D modelling software proficiently to build models and apply various modelling effects
- correctly store 3D models in appropriate file formats using industry naming conventions.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the stages in the production process from initial design through to finished product
- outline basic modelling principles used to build 3D digital models
- explain how geometry is used to create scale, form, weight and volume in 3D models
- describe the concept of integrity as it applies to 3D modelling
- explain the relationship between topology and deformation
- describe the process of rendering as it applies to 3D modelling
- outline intellectual property considerations if using images from external sources
- outline work health and safety standards as they apply to using screens and keyboards for extended periods of time.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- production documentation
- software for producing 3D digital models
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAANM401 Create advanced 3D digital models

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to prepare 3D digital models to a high level of finish, ready to use in a range of contexts.

It applies to individuals who prepare 3D digital models for use in animations, high-end games, virtual worlds or specialist digital resource materials in areas such as medicine, architecture, engineering and aeronautics. They work with minimum supervision and collaborate closely with other production team members, frequently under pressure, to deliver to schedule deadlines.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

CUAANM303 Create 3D digital models

Unit Sector

Visual Communication – Animation and Digital Effects

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Clarify work requirements	1.1 Identify requirements and purpose for 3D digital models with reference to production documentation

ELEMENT	PERFORMANCE CRITERIA
	1.2 Determine work flow sequences in consultation with relevant personnel, to ensure production schedule deadlines are met 1.3 Select modelling technique that suits production requirements 1.4 Select digital modelling software that suits production, delivery platform and modelling technique
2. Design and develop 3D models	2.1 Use features of digital modelling software to build detailed 3D models that meet design and aesthetic requirements 2.2 Adopt safe ergonomic practices when using screens and keyboards for extended periods of time 2.3 Use software features and geometry to shape models and apply various effects to simulate physical realism in characters and environments as required 2.4 Use scripting language to enhance functionality of the models as required 2.5 Create controls that are logical and easy to use, if required 2.6 Check models have not infringed copyright 2.7 Liaise with other team members to ensure models relate to other aspects of the production 2.8 Refine and check integrity of models until they meet design requirements 2.9 Confirm with relevant personnel that production requirements have been met and make adjustments as required
3. Finalise 3D digital models	3.1 Test models to identify faults, and adjust as required 3.2 Render final models in appropriate output file formats 3.3 Make back-up copies of files, and save and store 3D models using standard naming conventions 3.4 Submit final models to relevant personnel for approval by agreed deadlines 3.5 Review own work and processes used for constructing 3D digital models and note areas for future improvement

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.1	Analyses textual information from relevant sources to identify project requirements
Writing	1.2, 2.4, 3.3, 3.5	Uses clear and technically specific language to clarify requirements and complete reports and documentation
Oral Communication	1.1, 1.2, 2.7, 2.9	- Speaks clearly using effective language to convey requirements and discuss improvements - Uses listening and questioning techniques to confirm understanding
Navigate the world of work	2.2, 2.6, 3.2, 3.3	- Follows enterprise procedures when managing files and directories including back-up of files - Conducts work according to legislative and organisational requirements
Interact with others	1.1, 1.2, 2.7, 2.9, 3.4	Maintains the production process in association with others through discussion and consultation
Get the work done	1.2-1.4, 2.1-2.6, 2.8, 2.9, 3.1-3.5	- Plans and implements workflow to prepare 3D digital models for production within deadlines Makes decisions directly related to task and role requirements - Selects software based on requirements of job and knowledge of software features - Uses digital tools to manage files and to develop refined, accurate 3D models in a range of styles

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAANM401 Create advanced 3D digital models	CUFANM401A Prepare 3D digital models for production	Updated to meet Standards for Training Packages. Title changed. Elements and performance criteria edited for clarity.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAANM401 Create advanced 3D digital models

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- create 3D digital models at a high level of finish that:
 - perform to specifications
 - meet technical, design and aesthetic requirements
- use animation software and scripting languages to produce digital modelling effects that create realism in the models
- store 3D models in appropriate file formats using industry naming conventions
- work collaboratively with others in the production team to ensure models are appropriate for other aspects of the production
- review own performance and the modelling process for improvement.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline typical challenges with creating 3D models and how to handle these
- describe various techniques used in 3D modelling
- explain how geometry and an understanding of anatomy is used to simulate physical realism in modelling
- explain how effects, such as lighting, colour and composition influence the model appearance and characteristics
- identify and compare scripting languages used in 3D modelling
- describe the process of rendering as it applies to 3D modelling and how this differs for various delivery platforms
- explain the concept of integrity as it applies to 3D modelling

- outline the process for checking compliance with copyright requirements
- describe relevant work health and safety standards which relate to working with computers and keyboards.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- production documents and briefs
- relevant personnel
- 3D modelling software.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAANM403 Create titles for screen productions

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to design and develop opening titles and captions for screen productions including film and television, games and e-learning resources.

It applies to individuals who generate digital titles and work collaboratively with directors and post-production personnel to meet deadlines.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Animation and Digital Effects

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Clarify work requirements	1.1 Clarify requirements for screen titles with reference to production documentation 1.2 Determine workflow sequences in consultation with relevant personnel to ensure production schedule deadlines are met 1.3 Confirm available budget for the production of titles as required
2. Prepare items to be included in titles	2.1 Produce and maintain a schedule of items to be included in titles 2.2 Import items from other sources as required

ELEMENT	PERFORMANCE CRITERIA
	2.3 Obtain copyright clearances to use imported items as required 2.4 Select appropriate fonts and/or create fonts as required
3. Generate and assess ideas	3.1 Generate a range of ideas for design of screen titles that respond to briefs and provide creative solutions to design issues 3.2 Discuss ideas and collaborate, as required, with relevant production personnel to contribute ideas to initial concepts 3.3 Appraise ideas for implications on cost, technical feasibility and suitability to meet specifications
4. Create titles	4.1 Incorporate and manipulate moving or static graphic items to be included in titles 4.2 Modify titles and source items to achieve required visual effect 4.3 Trial various techniques and styles and produce initial compilation of titles ensuring style, content and creative intentions are met 4.4 Choose appropriate parameters of display to meet with creative requirements and technical specifications 4.5 Review initial titles to ensure they meet technical and creative requirements 4.6 Check movement of titles and other graphic items maximises the visual impact required for productions 4.7 Check titles incorporate and synchronise captions with required images and sound 4.8 Check titles are legible and appropriately spaced 4.9 Record and store titles and other graphic images according to enterprise procedures 4.10 Adopt safe ergonomic practices when using screens and keyboards for extended periods of time
5. Finalise titles	5.1 Present initial title compilations to relevant personnel for feedback 5.2 Evaluate and revise designs until they meet required outcomes 5.3 Confirm accuracy of text, spelling, punctuation and content 5.4 Discuss and agree with relevant personnel to additional requirements and modify titles as required 5.5 Check agreement is reached with, and approval granted by, relevant personnel before proceeding with final production of titles 5.6 Save and archive files in appropriate formats following

ELEMENT	PERFORMANCE CRITERIA
	enterprise procedures 5.7 Review process of creating titles and note areas for future improvement

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 4.4, 4.5, 4.8, 5.3	Interprets textual and visual imagery, as well as technical and financial information from relevant sources to clarify production requirements
Writing	1.1, 1.2, 2.1, 2.3, 4.8, 5.3, 5.4, 5.7	- Ensures accuracy of text and correct grammatical forms and vocabulary is used - Modifies, reviews and documents improvement strategies - Prepares and maintains workplace documentation to ensure production schedules and timelines are met
Oral Communication	1.1-1.3, 2.2, 2.3, 3.2, 4.7, 5.1, 5.2, 5.4, 5.5	- Obtains information by listening and questioning - Uses clear language to contribute information and express requirements
Numeracy	1.3	Uses knowledge of mathematical calculations to determine implications of cost predictions against job requirements
Navigate the world of work	2.3, 4.9, 4.10, 5.6	- Follows enterprise procedures when managing files and directories - Adheres to work health and safety requirements - Takes responsibility for satisfying copyright requirements
Interact with others	1.1-1.3, 2.2, 2.3, 3.2, 5.1, 5.2, 5.4, 5.5	- Collaborates with personnel to clarify production requirements and generate creative ideas - Uses interpersonal skills to negotiate agreement before completion of production projects
Get the work done	1.2, 1.3, 2.1-2.4, 3.1-3.3, 4.1-4.9, 5.4, 5.7	- Plans and organises tasks required to achieve required outcomes - Makes decisions directly related to own tasks - Uses problem solving techniques to develop creative

		and practical solutions that consider design, technical and budgetary requirements • Selects and uses digital technologies and tools to develop accurate screen titles and manage files and directories

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAANM403 Create titles for screen productions	CUFANM403A Create titles for screen productions	Updated to meet Standards for Training Packages. Minor edits to clarify elements and performance criteria.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAANM403 Create titles for screen productions

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- create screen titles that:
 - meet the brief requirements
 - integrate production items correctly
 - achieve required visual impact
 - meet production deadlines
- work collaboratively with others in the production team to generate a range of creative ideas
- save and store titles and other graphic images according to enterprise procedures
- review the design process for improvement.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline typical challenges of creating titles for screen productions and how to handle these
- explain how principles of typography and motion techniques are applied to title design
- identify copyright requirements for importing items into screen titles
- identify relevant work health and safety standards which relate to working with screens and keyboards.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- production documentation
- assets to be included in screen title production
- software to create titles
- relevant personnel.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAANM503 Design animation and digital visual effects

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to design animation and digital visual effects for screen productions such as television commercials, feature films, animated films or interactive games.

It applies to individuals who have high-level skills in research and creative concept development. They work closely with people such as directors or producers to generate concepts and prepare design specifications for animation or visual effects for a range of projects.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Animation and Digital Effects

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Clarify design requirements	1.1 Assess scope of design projects with reference to production documentation 1.2 Analyse factors that may impact the design process 1.3 Participate in preliminary concept meetings to clarify the design requirements 1.4 Itemise elements to be addressed with reference to production

ELEMENT	PERFORMANCE CRITERIA
	documentation
2. Generate and assess ideas	2.1 Generate a range of design ideas that respond to the brief and provide creative solutions to design issues 2.2 Assess ideas and collaborate, as required, with relevant personnel to maximise contribution of ideas to initial concepts 2.3 Appraise ideas for implications on cost, technical feasibility and creative requirements
3. Conduct research and experimentation	3.1 Research content and target audience characteristics that influence production styles and techniques 3.2 Trial various techniques to test their suitability for given design projects 3.3 Organise research and provide relevant personnel access to experimentation materials 3.4 Analyse and document research and experimentation findings
4. Produce draft design specifications	4.1 Evaluate initial concept ideas in light of research and experimentation findings in consultation with relevant personnel, and select the most appropriate approach 4.2 Discuss and agree with relevant personnel on suitable documentation to present design specifications 4.3 Create storyboards as required 4.4 Prepare or supervise development of sample material to be included in design specifications as required 4.5 Draft design specifications to advise the design and development teams 4.6 Discuss draft design specifications with relevant personnel to ensure all requirements have been addressed
5. Finalise design specifications	5.1 Present draft design specifications to relevant personnel for review to ensure they are clearly presented 5.2 Participate in evaluation of design specifications 5.3 Negotiate and agree to additions or modifications and amend design specifications as required 5.4 Clarify designer's role for the production phase 5.5 Review process of designing animation and digital visual effects and note areas for future improvement

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 3.1, 4.6	Interprets and analyses textual information from a range of sources for idea development and to confirm job parameters
Writing	1.4, 2.1, 3.4, 4.3-4.5, 5.5	- Documents research, task requirements, workflow sequences and reviews in an appropriate format - Names files using standard naming conventions
Oral Communication	1.3, 2.2, 3.1, 4.1, 4.2, 4.4, 4.6, 5.1-5.4	- Uses clear language to explain and discuss task requirements - Uses questioning and listening techniques to confirm understanding
Interact with others	1.3, 2.2, 3.1, 4.1, 4.2, 4.4, 4.6, 5.1-5.4	- Uses appropriate communication practices and protocols to present drafts - Collaborates with others to refine ideas, discuss project requirements and negotiate outcomes
Get the work done	1.1-1.4, 2.1-2.3, 3.1-3.4, 4.1-4.6, 5.1-5.5	- Plans and coordinates tasks for self and others, monitoring progress to ensure project meets design specifications - Uses analytical processes to arrive at decisions directly related to task requirements - Uses experimentation to produce creative solutions - Uses digital tools to conduct research, access, develop, distribute and store material

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAANM503 Design animation and digital visual effects	CUFANM503A Design animation and digital visual effects	Updated to meet Standards for Training Packages. Minor edits to clarify performance criteria.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAANM503 Design animation and digital visual effects

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- produce design specifications for animation and digital visual effects projects that are:
 - well documented and clearly presented
 - supported by appropriate research and experimentation
 - meet production requirements
- generate a range of concepts for animation and digital visual effects that meet cost, technical feasibility and production requirements, in collaboration with other team members
- conduct trials, research and experimentation in developing design concepts for animation and digital visual effects
- analyse and document research findings based on trials and experimentation for improving concept designs
- review design process for improvement.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain factors that impact on the design of animation and digital visual effects
- explain the audience characteristics that influence production style, content and technique decisions
- outline the main requirements for a design specification.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- production documents
- appropriate software
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUACMP301 Implement copyright arrangements

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to implement individual or collaborative copyright arrangements including sourcing copyright information, gaining clearance to use other people's material, protecting material from unauthorised use and applying copyright notices for creative works.

It applies to individuals who work under supervision with some responsibility regarding the planning and completion of work tasks.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Regulation, Licensing and Risk – Compliance

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Source information on copyright	1.1 Identify sources of information on copyright, to determine what is and what is not protected by copyright 1.2 Identify and determine the role of copyright collection societies 1.3 Identify and discuss copyright laws and regulations with relevant personnel
2. Obtain permission to	2.1 Identify copyright owner's exclusive rights to creative works

ELEMENT	PERFORMANCE CRITERIA
use copyright material	2.2 Determine need for copyright clearance and identify potential for fair use of copyright material 2.3 Discuss and confirm copyright clearance issues with relevant personnel 2.4 Determine if moral rights or performer's rights need to be credited 2.5 Obtain and accurately record copyright clearance permissions
3. Protect material from unauthorised use	3.1 Confirm original work as being the result of individual or collaborative effort 3.2 Discuss and formally record copyright ownership or proportional ownership with relevant personnel 3.3 Identify and confirm individual or collaborative copyright responsibilities 3.4 Identify potential infringements to copyright claims 3.5 Apply copyright notices on creative works in a correct manner 3.6 Prepare, date and store documentation to track copyright notices

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 3.1	Interprets documentation to assist with copyright requirements
Writing	2.5, 3.2, 3.6	Completes workplace documentation accurately and legibly using technically specific language
Oral Communication	1.3, 2.3, 3.2	- Obtains information by listening and questioning - Uses clear language to contribute information and express requirements
Navigate the world of work	1.1-1.3, 2.1-2.5, 3.1, 3.6	Understands and complies with relevant legislation to assist with copyright arrangements
Interact with others	1.3, 2.3, 3.2	Works collaboratively to determine and complete requirements

Get the work done	1.1-1.3, 2.2, 2.4, 2.5, 3.1, 3.3-3.6	- Plans and organises routine tasks, taking some responsibility for identifying and confirming copyright issues - Recognises and responds to predictable routine problems seeking assistance when problems are beyond immediate responsibilities or experience - Uses technology to track and download material

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUACMP301 Implement copyright arrangements	CUFCMP301A Implement copyright arrangements	Updated to meet Standards for Training Packages.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUACMP301 Implement copyright arrangements

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- source information and seek assistance to organise copyright permission and clearance for creative works
- correctly apply copyright notices on creative works
- recognise infringements of copyright
- correctly document and store copyright clearances claims and notices.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the concepts of exclusive rights, fair use, moral rights and performer's rights
- describe procedures to determine copyright ownership
- identify the range of sources of copyright information
- identify Australian organisations responsible for holding copyright collections
- identify laws and regulations that govern copyright in Australia.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- information sources on definitions, laws and regulations about copyright
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUADIG201 Maintain interactive content

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to maintain interactive content for websites, learning resources or social media channels, using a content management system.

It applies to individuals, working under direction, who upload media assets and change text content.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Digital Content and Imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Check content	1.1 Confirm frequency of content updates and production deadlines with relevant personnel 1.2 Obtain, access and review content to ensure correct versions 1.3 Confirm existing content to be retained or deleted with relevant personnel
2. Check links and media assets	2.1 Check existing links are valid and source replacement links if required 2.2 Check assets are functional and in correct file format and size for

ELEMENT	PERFORMANCE CRITERIA
	inclusion 2.3 Document technical and content issues in accordance with enterprise procedures 2.4 Confirm with relevant personnel that copyright clearance has been obtained on all new content
3. Update content	3.1 Access content management system to upgrade content 3.2 Adopt safe ergonomic practices when using equipment for long periods of time 3.3 Delete closed links and re-establish new site links if available 3.4 Check internal page links and rectify or delete as required 3.5 Import and/or change content material as required and specify appropriate metadata or tags 3.6 Make heading, typographical, caption and image revisions, applying appropriate style sheets and alt tags if required 3.7 Add pages or screens as required, applying appropriate templates or themes 3.8 Submit edited files to server, and check upload was successful 3.9 Advise relevant personnel if new interface designs are required to incorporate additional materials
4. Test and confirm changes	4.1 Check all content is displayed and functions on server as required 4.2 Confirm with relevant personnel that all changes have been made 4.3 Store original content securely and file using standard industry conventions

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 2.1, 2.3, 3.3-3.7, 4.1, 4.3	- Identifies and follows familiar written instructions - Checks content to ensure styles, links and subject

		matter are accurate
Writing	2.3, 3.3-3.7, 4.3	- Accurately enters electronic information in required format - Prepares technical documents in required format
Oral Communication	1.1, 1.3, 2.4, 3.9, 4.2	- Uses questioning and listening techniques to clarify requirements - Uses clear, everyday language to discuss tasks with relevant personnel
Navigate the world of work	2.3, 2.4, 3.2	Adheres to organisational and legislative requirements
Interact with others	1.1, 1.3, 2.4, 3.9, 4.2	Uses appropriate communication practices to discuss and confirm requirements
Get the work done	1.2, 2.1, 2.2, 3.1, 3.3-3.8, 4.1, 4.3	- Plans and completes work tasks, seeking advice as necessary - Uses relevant software to examine, amend and upload interactive content

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUADIG201 Maintain interactive content	CUFDIG201A Maintain interactive content	Updated to meet Standards for Training Packages. Minor edits to performance criteria.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUADIG201 Maintain interactive content

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- maintain interactive content for websites and/or social media channels including:
 - checking links and media assets
 - updating text, media assets and pages
 - assigning correct metadata or tags
 - checking that changes have uploaded successfully
- use a content management system proficiently
- document technical and content issues according to enterprise procedures
- store content according to industry conventions.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain how outdated links impact usability of web pages
- explain the procedure for checking copyright clearance
- describe how metadata and tags are used to classify content
- describe the purpose of alt tags and how they relate to accessibility standards
- explain safe work practices in relation to working on computers for periods of time.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- appropriate content
- content management system, the internet and authoring tools.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUADIG301 Prepare video assets

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to prepare video assets for inclusion in interactive media.

It applies to individuals who work in collaboration with others and under supervision to convert video into forms appropriate for streaming, downloading and/or digital media products. In smaller organisations, they may combine this role with video editing, authoring or programming.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Digital Content and Imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify video assets	1.1 Obtain and assess digital video content as determined by production 1.2 Clarify production schedules and deadlines with relevant personnel 1.3 Identify file format, output purpose, destination and platform of source video according to production requirements 1.4 Discuss, with relevant personnel, required output file format and

ELEMENT	PERFORMANCE CRITERIA
	codecs for specified bandwidths, and appropriate video encoding software
2. Prepare video assets	2.1 Load video files into appropriate video encoding software 2.2 Check duration and quality of video sequences meet production requirements, and balance and clip sequence if necessary 2.3 Determine and apply appropriate video and audio codecs to meet quality standards 2.4 Batch and optimise video files where possible 2.5 Save files in appropriate output file format using standard industry or enterprise naming conventions 2.6 Follow safe ergonomic practices when using computer equipment for long periods of time
3. Package video assets	3.1 Assign metadata tags if required 3.2 Group files in folder system using standard industry or enterprise naming conventions 3.3 Archive and store in share drive or asset repository for production team access

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 2.2, 2.5, 3.1, 3.2	- Identifies and interprets information in organisational documents - Locates correct folders for storing electronic data - Checks textual information for accuracy
Writing	2.5, 3.1, 3.2	- Writes metadata tags to aid classification of files - Applies standard naming conventions to electronic data
Oral Communication	1.2, 1.4	- Discusses video requirements using industry appropriate language - Uses questioning and listening techniques to clarify requirements

Numeracy	2.2, 2.3	Calculates basic bandwidth requirements
Navigate the world of work	2.5, 2.6, 3.2	Complies with enterprise and legislative requirements
Interact with others	1.2, 1.4	Uses appropriate communication practices and protocols to confirm requirements with personnel
Get the work done	1.1-1.4, 2.1-2.5, 3.1-3.3	- Plans and completes tasks required to achieve requirements within deadlines - Makes decisions directed related to completion of tasks - Used digital tools to prepare and store video assets

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUADIG301 Prepare video assets	CUFDIG301A Prepare video assets	Updated to meet Standards for Training Packages. Performance criteria edited and added.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUADIG301 Prepare video assets

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- prepare video sequences for use in media distribution channels or interactive media products
- use video encoding software to prepare video sequences that meet quality requirements within production deadlines
- save and store files according to industry or enterprise conventions.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the features of the delivery platforms used to prepare video assets
- explain why video file compression is required
- identify common digital video sources and output formats
- explain appropriate codecs for various platforms and destinations
- describe techniques for saving and preparing digital video output to optimise file size
- explain purposes and procedures for correctly naming and tagging video files
- explain safe work practices in relation to working on computers for periods of time.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- video encoding and editing software and equipment
- manuals and instructions.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUADIG302 Author interactive sequences

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to use an authoring tool to produce discrete interactive sequences for websites.

It applies to individuals working collaboratively with technical assistance and under direction, who develop small components such as web pages or a sequence of screens, which are integrated into a larger project.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Digital Content and Imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan use of authoring tool	1.1 Identify a range of appropriate authoring software and discuss their application to various delivery platforms with relevant people 1.2 Clarify design specifications of the project and deadlines with relevant people 1.3 Discuss with relevant personnel the technical requirements of the project and select appropriate authoring software
2. Prepare to author	2.1 Load selected authoring software, create a new file in website

ELEMENT	PERFORMANCE CRITERIA
sequence	directory for specified task and name using standard industry naming conventions 2.2 Source and assemble all media assets and text content, and check compliance with copyright conditions 2.3 Display and use tools and features of authoring software 2.4 Adopt safe ergonomic practices when using screens and keyboards for extended periods of time
3. Produce interactive sequences	3.1 Produce screen layout according to design specifications applying basic visual design principles and/or templates or themes 3.2 Create interactive media components as required 3.3 Source text content and apply style sheets to format text 3.4 Source relevant media assets, optimise if required, and integrate using appropriate file formats 3.5 Link all components according to production storyboard 3.6 Manipulate HTML mark-up code where errors are occurring or to refine sequence functionality 3.7 Apply features to optimise accessibility 3.8 Save file to website directory structure as components are produced
4. Check functionality of interactive sequence	4.1 Check interactive elements function with minimal error on a variety of devices, operating systems and browsers 4.2 Incorporate changes as required 4.3 Present sequence to relevant people

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.1, 2.2, 3.1, 3.3, 3.5, 3.6, 3.8	- Identifies and interprets information in organisational documents - Locates correct folders for storing electronic data - Checks textual information for accuracy

Writing	2.1, 3.6, 3.8	Selects the vocabulary and conventions appropriate to text for writing code and naming files
Oral Communication	1.1-1.3, 4.3	Asks questions and listens carefully to confirm design and technical specifications of the project
Navigate the world of work	2.2, 2.4	Complies with legislative requirements
Interact with others	1.1-1.3, 4.3	Uses appropriate communication practices and protocols to confirm requirements and present interactive sequences
Get the work done	1.1-1.3, 2.1-2.3, 3.1-3.8, 4.1, 4.2	- Takes responsibility for planning and producing interactive sequences according to project requirements and design principles - Makes decisions directed related to completion of tasks - Uses digital tools to create, optimise and store interactive sequences

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUADIG302 Author interactive sequences	CUFDIG302A Author interactive sequences	Updated to meet Standards for Training Packages. Minor edits to elements and performance criteria to clarify intent.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUADIG302 Author interactive sequences

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- assemble text content, interactive media components and media assets required for a project
- use appropriate software to produce interactive media sequences that meet design and project specifications within deadlines
- apply visual design principles, templates, style sheets and HTML mark-up language to interactive sequences
- check interactive sequence functionality on at least two operating systems, browsers and devices
- save and store files correctly.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list appropriate file formats for web delivery
- outline when optimisation of media assets is necessary
- explain why application of accessibility standards in the web environment is important
- describe basic visual design principles as they apply to website page layout
- explain safe work practices in relation to working on computers for periods of time
- explain the procedure for checking copyright clearance.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- text and media assets
- authoring software.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUADIG304 Create visual design components

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to create visual designs for interactive media components that can be integrated into a range of media products.

It applies to individuals who generate and assess ideas to create visual design components in response to specifications under supervision in a team environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Digital Content and Imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Clarify work requirements	1.1 Clarify visual design components required in the project brief, in consultation with relevant personnel 1.2 Identify project timelines and discuss factors that may determine or affect visual design concepts 1.3 Clarify, in discussion with relevant personnel, the target user or audience, and determine format and delivery platform
2. Generate and assess ideas	2.1 Research media products, designs, images, artwork and other creative sources that may inspire visual design ideas

ELEMENT	PERFORMANCE CRITERIA
	2.2 Develop a range of visual design ideas that are technically feasible, respond to project specifications and provide creative solutions to design issues 2.3 Present and review visual design ideas with relevant personnel
3. Develop design concept	3.1 Experiment with traditional and digital methods to create required visual design components 3.2 Explore a range of typographical and visual design elements to create components 3.3 Evaluate initial design ideas with relevant personnel to select final design concept 3.4 Confirm design concept complies with copyright laws 3.5 Check output format meets delivery platform requirements 3.6 Adopt safe ergonomic practices when using equipment for long periods of time
4. Produce components	4.1 Develop components based on the final design concept using various design techniques 4.2 Apply visual design principles and communication principles to produce components that have high visual impact 4.3 Save components in an appropriate format according to project specifications
5. Finalise visual design components	5.1 Review visual design components against design and technical specifications 5.2 Discuss and confirm additional requirements or modifications with relevant personnel, and make amendments as required 5.3 Save and archive visual design components using industry or enterprise naming conventions and version control protocols

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.1, 3.1, 3.2, 3.3,	Reviews and researches creative source material to generate ideas

	4.1, 4.3, 5.1, 5.2, 5.3	- Checks that output meets requirements - Locates correct folders for storing electronic data
Writing	2.2, 3.1, 3.2, 4.1, 4.3, 5.2, 5.3	- Prepares information to accompany design components - Names files according to requirements
Oral Communication	1.1-1.3, 2.3, 3.3, 4.3, 5.2	Participates effectively in spoken interactions using active listening and questioning to confirm and clarify understanding
Navigate the world of work	3.4, 3.6	Complies with legislative requirements
Interact with others	1.1-1.3, 2.3, 3.3, 4.3, 5.2	Collaborates with relevant personnel to ensure that end result meets requirements
Get the work done	1.1-1.3, 2.1-2.3, 3.1-3.3, 3.5, 4.2, 4.3, 5.1-5.	- Takes responsibility for planning and producing design components according to project requirements and design principles - Makes decisions directed related to completion of tasks - Uses experimentation to develop new or innovative design approaches - Selects and uses appropriate software to conceive, produce, store and present visual design components

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUADIG304 Create visual design components	CUFDIG304A Create visual design components	Updated to meet Standards for Training Packages. Minor edits to elements and performance criteria.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUADIG304 Create visual design components

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- explore and experiment with design techniques and visual design and communication principles to produce ideas and concepts for visual design components
- use design techniques to create visual design components that respond effectively to a project brief
- present and discuss ideas, concepts and designs with relevant personnel
- save and archive files using standard industry or enterprise naming conventions.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe differences between traditional and digital methods in creating visual images, and advantages and disadvantages of each
- describe visual design, typographic and communication principles used to construct visual design components
- explain safe work practices in relation to working on computers for periods of time
- explain the procedure for checking copyright clearance.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- project briefs
- relevant software

- manuals and information to support software.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUADIG401 Author interactive media

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to author a complete interactive media product, for example, an entire website.

It applies to individuals who apply sound knowledge of mark-up and scripting languages to develop templates, themes styles sheets, forms and form objects for programmers and the technical support team. They may also use a variety of authoring software used to produce complex interactions such as digital simulations, games and puzzles. They work primarily on client-side technologies.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Digital Content and Imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify multimedia elements	1.1 Assess design specifications to determine technical and creative objectives of the project 1.2 Locate and assess content required for production 1.3 Discuss issues of integration and formats of media assets with relevant personnel, and confirm production timelines 1.4 Determine, with relevant personnel, an interactive sequence to

ELEMENT	PERFORMANCE CRITERIA
	become the prototype
2. Identify scope of authoring software	2.1 Identify a range of industry-standard authoring software and assess in relation to specified delivery platform 2.2 Discuss suitability of authoring software to meet specified outcomes with relevant personnel 2.3 Select authoring software to meet production requirements
3. Use authoring software	3.1 Load authoring software and create a file directory structure for the specified task and name using standard industry or enterprise naming conventions 3.2 Display and use tools and features of authoring software relevant to the authoring process 3.3 Adopt safe ergonomic practices when using screens and keyboards for extended periods of time.
4. Create interactive sequence	4.1 Slice and reassemble the user interface appropriate to the authoring software 4.2 Import and assemble components in appropriate sequence according to creative requirements 4.3 Create interactive features according to creative and technical requirements, sourcing and writing appropriate mark-up and scripting languages as required 4.4 Check that interactive sequence conforms to navigation design 4.5 Integrate media assets to optimum levels of technical performance 4.6 Check interactive sequence conforms to loading specifications 4.7 Test for interoperability and accessibility, eliminate all bugs and validate scripting 4.8 Present interactive sequence as a prototype ensuring sequence meets creative, production and technical requirements 4.9 Save output file formats and identify for specified purpose
5. Evaluate interactive prototype	5.1 Present prototype to relevant personnel 5.2 Evaluate prototype against design specifications, including achievement of a creative and user-centred product 5.3 Discuss and agree on any required changes and make adjustments to prototype 5.4 Assist in user testing as required

ELEMENT	PERFORMANCE CRITERIA
	5.5 Evaluate feedback from user testing 5.6 Seek confirmation from relevant personnel to transform prototype into final product
6. Finalise interactive media product	6.1 Make necessary changes as indicated by user testing 6.2 Replicate prototype functionality to complete the interactive product 6.3 Make final checks to ensure sequences conform to design specifications 6.4 Test for interoperability and accessibility, eliminate bugs and validate scripting 6.5 Save to specified storage system accessible to production team 6.6 Assist in loading product to specified platform as required

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 3.1, 4.2-4.4, 4.6-4.9, 5.2, 5.5, 6.1, 6.3, 6.4, 6.5	- Selects and applies a range of reading strategies to interpret design and technical requirements - Reviews and interprets feedback from user trials to enable completion of final product - Validates scripting to ensure accurate operation of interactive media - Locates correct folders for logical storing of electronic data to assist with production
Writing	3.1, 4.3, 4.9, 6.5	Creates a range of texts incorporating specific scripting language, mark-up and standard file naming conventions
Oral Communication	1.3, 1.4, 2.2, 4.8, 5.1-5.6	Uses clear language, questioning and listening techniques to specify and discuss interactive prototypes and final product
Navigate the world of work	3.3	Complies with legislative responsibilities
Interact with	1.3, 1.4, 2.2, 4.8,	Uses appropriate communication practices and

others	5.1-5.6	protocols to confirm requirements and present prototypes to a range of personnel
Get the work done	1.1-1.4, 2.1-2.3, 3.1, 3.2, 4.1-4.9, 5.1-5.6, 6.1-6.6	• Takes responsibility for managing a range of tasks concurrently to produce an interactive prototype and final product which meets creative, production and technical requirements • Applies evaluation and diagnostic tests to identify necessary adjustments • Uses authoring and graphics software to create, test, evaluate and adjust interactive prototypes • Identifies, saves and stores final prototypes in digital format

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUADIG401 Author interactive media	CUFDIG401A Author interactive media	Updated to meet Standards for Training Packages. Minor edits to elements and performance criteria to clarify intent.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUADIG401 Author interactive media

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- discuss and determine requirements for an interactive media product
- use authoring software to create logical file directory structures and build a prototype of an interactive media product
- evaluate and incorporate feedback from user testing to the prototype
- use authoring software to develop a fully functional interactive media product that:
 - conforms to design and creative requirements specifications
 - meets accessibility and interoperability standards.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain technical requirements for integrating media assets (video, audio, animation, images) for use on a range of delivery platforms
- describe interoperability and accessibility standards used in interactive media product design
- explain the purpose and process of script validation
- outline basic health and safety requirements when working on computers and keyboards.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- design specifications

- sample content including a range of media assets
- authoring software
- software manuals and other relevant information.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUADIG402 Design user interfaces

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to design user interfaces for interactive media products such as web environments, games or e-learning resources.

It applies to individuals who apply visual communication skills and work collaboratively in a team environment to develop final specifications for user interface designs.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Digital Content and Imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify project requirements	1.1 Discuss concept with relevant personnel to clarify design briefs 1.2 Confirm technical parameters of interactive media products, including delivery platform 1.3 Identify target audience and user characteristics 1.4 Assess information architecture specifications
2. Produce design specifications	2.1 Visualise concepts and develop preliminary sketches based on content architecture and audience characteristics 2.2 Use visual design principles to sketch screen layouts showing

ELEMENT	PERFORMANCE CRITERIA
	main spatial zones 2.3 Specify functional areas within screen layouts 2.4 Specify metaphors if required, and look and feel of user interfaces 2.5 Develop final detailed sketches taking into consideration all ideas generated 2.6 Review interfaces with relevant personnel and modify design if required to meet requirements of brief 2.7 Write user interface design specifications and instructions for development teams to use 2.8 Adopt safe ergonomic practices when using screen and keyboards for extended periods of time
3. Test and finalise user interface designs	3.1 Develop prototype of user interface 3.2 Plan and implement testing of interface design with sample users 3.3 Evaluate results of testing and adjust information architecture in design specifications if required 3.4 Obtain final agreement on finished designs from relevant personnel

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.3, 1.4	Interprets and analyses technical and descriptive information in project documents
Writing	2.1-2.5, 2.7, 3.2	- Uses specific technical, diagrammatic and visual textual language appropriate to audience and environment to prepare detailed project related documentation - Writes test documents to collect appropriate information
Oral Communication	1.1, 2.6, 3.2, 3.4	Uses careful listening and questioning techniques to confirm and clarify design, technical and user information and clear, direct language to obtain

		agreement from others
Navigate the world of work	2.8	Follows work health and safety requirements
Interact with others	1.1, 2.6, 2.7, 3.2, 3.4	Uses appropriate communication practices and protocols to discuss and present design concepts to a range of people
Get the work done	1.1-1.4, 2.1, 2.5, 3.2-3.4	- Plans, organises and implements tasks required to finalise design ideas - Interprets and translates project criteria into a range of creative possibilities - Analyses and evaluates information to make decisions about design architecture and navigation specifications

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUADIG402 Design user interfaces	CUFDIG402A Design user interfaces	Updated to meet Standards for Training Packages. Minor edits to elements and performance criteria.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUADIG402 Design user interfaces

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- develop sketches for user interfaces that consider:
 - visual design principles
 - target audience characteristics
 - content architecture specifications
- produce user interface design specifications for an interactive media product that:
 - respond to the design brief
 - meet technical and creative parameters
 - are in appropriate format
 - include instructions for development teams
- develop a prototype user interface design
- plan and conduct testing of prototype and analyse findings for incorporation into designs
- review ideas and design specifications with relevant personnel.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe user characteristics considered in design and development of interfaces
- explain spatial and functional areas of screen layout
- explain steps in testing a prototype design
- describe what is included in information architecture and design specifications
- list typical formats and techniques for documenting user interface designs
- identify basic health and safety requirements when working on computers and keyboards.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- briefs on which to base user interface designs
- sample users.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUADIG403 Create user interfaces

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to create a user interface for an interactive media product.

It applies to individuals who respond to design specifications and generate a range of design options that incorporate user-centred design principles and comply with platform standards. They work in a team environment with some supervision or guidance.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Digital Content and Imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Clarify project requirements	1.1 Discuss, with relevant personnel, the design specifications to clarify target user, audience and purpose of interactive media products 1.2 Identify text content and media assets to be integrated into user interfaces 1.3 Determine file output format suitable for the delivery platform of interactive media products

ELEMENT	PERFORMANCE CRITERIA
2. Generate ideas	2.1 Research interactive media product user interfaces, designs, images, artwork and other creative sources that may inspire design ideas 2.2 Collect logos, trademarks and other relevant information that may influence or be incorporated into design ideas 2.3 Obtain and record copyright clearance, if required, for images used in designs 2.4 Use sketches and concepts in specifications to generate a range of technically feasible and creative design ideas 2.5 Present interface design ideas to relevant personnel for discussion and feedback
3. Plan approach	3.1 Select final design, incorporating any feedback from relevant personnel 3.2 Identify a range of appropriate industry-standard graphics software 3.3 Discuss and select graphics software, with relevant personnel, to meet specified outcomes 3.4 Explore a range of typographical and visual design elements that could be used in development of interface designs
4. Produce user interfaces	4.1 Use graphics software to develop structure for user interfaces based on final design concepts 4.2 Source or create and integrate all graphic interactive components 4.3 Apply visual design and communication principles to development of user interfaces 4.4 Apply principles of user-centred design and standards for accessibility to development of user interfaces 4.5 Document styles for text and presentation for use in style sheets and templates or themes 4.6 Save user interfaces in an appropriate output format that satisfies technical parameters 4.7 Adopt safe ergonomic practices when using equipment for long periods of time
5. Finalise user interfaces	5.1 Review user interfaces to assess effectiveness of creative solutions, appropriateness to users and audience, and technical feasibility 5.2 Discuss additional requirements or modifications to the overall design with relevant personnel, and amend as necessary

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 3.4, 4.5, 4.6, 5.1	Interprets and analyses technical and descriptive information in project documents for design activities
Writing	2.3, 4.5, 4.6	- Records information in required format - Names files according to requirements
Oral Communication	1.1, 2.5, 3.1, 3.3, 5.2	Listens carefully in verbal exchanges and uses questioning techniques to clarify and confirm project requirement
Navigate the world of work	4.7	Complies with work health and safety requirements
Interact with others	1.1, 2.5, 3.1, 3.3, 5.2	Uses appropriate communication practices and protocols to elicit opinions and reach agreement on required changes
Get the work done	1.1-1.3, 2.1, 3.1-3.4, 4.1-4.4, 4.6, 5.1, 5.2	- Takes responsibility for organising and implementing tasks required to prepare, produce, present and finalise user interfaces - Analyses and evaluates information to make technical and design decisions - Uses formal thinking processes and exploration to generate ideas - Identifies, selects and uses suitable software to create, review, present, amend and store user interface files

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUADIG403 Create user interfaces	CUFDIG403A Create user interfaces	Updated to meet Standards for Training Packages.	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
		Performance criteria edited, combined and added.	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUADIG403 Create user interfaces

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- create technically feasible and creative interface design ideas that consider:
 - purpose of the interactive media product
 - target users
 - text content and media assets requirements
- use suitable software to create a user interface that:
 - uses visual design principles to communicate with target users or audience
 - demonstrates principles of user-centred design
 - meets required accessibility standards
 - includes documentation about style sheets, templates or themes used
 - is saved in an appropriate output format
- review ideas and user interface with relevant personnel.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe file output formats appropriate to a range of delivery platforms
- describe visual design and communication principles as they apply to interface designs
- explain user-centred design principles and their importance to creation of interactive media interfaces
- identify accessibility standards that apply to interface designs
- explain how typography influences user interface visual impact
- explain the purpose of copyright and outline copyright clearance procedures
- outline health and safety requirements when working for extended periods of time on computers and keyboards.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- design specifications
- graphics software.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUADIG404 Apply scripting language in authoring

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to write and apply scripting language in authoring interactive media.

It applies to individuals who apply skills in writing and customising their own code for work in client-side technologies. They integrate and develop basic scripting routines to enhance interaction levels or remedy functionality errors in interactive media products.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Digital Content and Imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Investigate scripting options	1.1 Assess design specifications to identify areas where scripting languages may be required 1.2 Locate script libraries for pre-written scripts 1.3 Identify areas where customised or new scripts may be necessary 1.4 Present and discuss scripting options with relevant personnel, and confirm compliance with design specifications
2. Write scripts	2.1 Scope control structures and algorithms using pseudo-code and

ELEMENT	PERFORMANCE CRITERIA
	flow charts 2.2 Check objects and assets are in place and identified by appropriate labels 2.3 Identify and recommend event handlers 2.4 Write code using correct syntax to meet functional requirements 2.5 Write comments to document coding where necessary 2.6 Use authoring environment, where appropriate, to check code and syntax 2.7 Save code in appropriate format 2.8 Adopt safe ergonomic practices when using screens and keyboards for extended periods of time
3. Integrate scripting language	3.1 Source and integrate scripts into authoring environment 3.2 Confirm scripted elements comply with all navigation and graphic design interface considerations 3.3 Eliminate or merge redundant code to ensure code is clean
4. Test scripting language	4.1 Test routines to verify script fulfils requirements 4.2 Conduct tests to ensure scripted elements conform to required technical specifications 4.3 Test for faults, and document findings 4.4 Use standard de-bugging techniques to remove fault
5. Evaluate scripting language	5.1 Liaise with relevant personnel to evaluate process, and record decisions 5.2 Archive suitable and relevant scripts for future use

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.4, 2.1-2.5, 2.7, 3.1, 3.2, 3.3, 4.2, 4.3, 5.2	Analyses and interprets complex text to determine compliance requirements, technical specifications and other job related information

Writing	2.1-2.5, 2.7, 3.1, 3.3, 4.3, 5.1	• Uses required language to accurately complete authoring requirements • Records information in required format • Names files according to requirements
Oral Communication	1.4, 5.1	• Uses language and features appropriate to the audience to present information and seek feedback • Uses questioning and listening techniques to clarify requirements
Numeracy	2.1, 2.4	• Uses specialised mathematical language and symbols to write and customise code
Navigate the world of work	2.8	• Complies with work health and safety responsibilities
Interact with others	1.4, 5.1	• Collaborates in technical decision-making and process evaluation with relevant personnel
Get the work done	1.1-1.4, 2.1-2.5, 3.1-3.3, 4.1-4.4, 5.1, 5.2	• Uses formal planning processes to organise the process of researching, writing and evaluating script • Makes decisions directly related to completion of required tasks • Uses analytical techniques to test and repair scripting language • Uses digital tools to create and test script

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUADIG404 Apply scripting language in authoring	CUFDIG404A Apply scripting language in authoring	Updated to meet Standards for Training Packages. Minor edits to performance criteria.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUADIG404 Apply scripting language in authoring

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- use design specifications and discussion with relevant personnel, to identify scripting requirements
- create pseudo-code and flowcharts to structure functional logic prior to coding
- write scripting language code to meet functional requirements for interactive media products
- produce clean, logical and well-documented code
- test code and de-bug as required to ensure interactive functions work without fault.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline typical challenges when writing scripts for interactive products and how to handle these
- describe a range of authoring software, scripting languages and scripted elements
- explain different structures used in scripting languages for authoring multimedia products, including Document Object Model (DOM) and Object Oriented Programming (OOP)
- identify basic health and safety requirements when working on computers and keyboards.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- design specifications

- authoring environment and software.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUADIG405 Produce innovative digital images

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to experiment with digital imaging techniques and ideas to develop an individual style or voice.

It applies to individuals who produce digital art images for electronic media or physical/online display in art publications and galleries.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual communication – digital content and imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Experiment with digital imaging techniques and media	1.1 Evaluate the potential for new approaches to digital imaging based on capabilities of known techniques 1.2 Adapt or introduce new tools, equipment and materials to achieve different effects 1.3 Experiment and extend the capabilities of digital imaging techniques 1.4 Use tools, equipment, materials and techniques safely and sustainably

ELEMENT	PERFORMANCE CRITERIA
2. Develop ideas for digital imaging	2.1 Discuss creative and other goals for digital image works 2.2 Research, adapt and use relevant ideas and approaches of other practitioners with consideration of intellectual property rights 2.3 Consider the potential of different digital imaging techniques when developing initial concepts 2.4 Refine and confirm concept based on experimentation, research and collaboration with others
3. Organise digital imaging resources	3.1 Assess specific resource requirements for development and presentation of works 3.2 Research and access potential sources of supply for digital imaging resources 3.3 Evaluate cost and other constraints that impact on the development and presentation of works 3.4 Set up or coordinate resources according to safety and other workplace requirements
4. Realise finished digital images	4.1 Use safe and sustainable practices throughout the production of work 4.2 Create digital images using techniques and media selected through research and experimentation 4.3 Review and refine ideas and approaches to complete the works 4.4 Finalise images in a format suitable for presentation and archive files according to industry standards 4.5 Document and record the development of the work and the research and ideas that informed it
5. Evaluate digital imaging work	5.1 Reflect on own work in terms of conceptual development and technical execution to identify areas for improvement 5.2 Discuss completed work and use feedback to improve future works

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance	Description

	Criteria	
Reading	2.2, 3.2, 3.4	Interprets and analyses a range of visual and textual information for application to job requirements
Writing	2.2, 3.3, 4.5	- Make notes of research findings and calculations using simple language for own reference - Produces logically structured information and visual material to convey research outcomes, conceptual development and production processes
Oral Communication	2.1, 2.4, 5.2	- Uses clear and relevant language to discuss concepts and techniques with others and seek feedback on work outcomes - Uses questioning and active listening techniques to clarify information, and confirm understanding
Numeracy	3.3	Estimates potential costs to assess their effect on project outcomes
Navigate the world of work	1.4, 2.2, 3.4 4.1, 4.4, 5.1, 5.2	- Takes personal responsibility for adherence to safety, sustainability and intellectual property requirements and industry standards when planning and undertaking digital imaging work - Reflects on own performance incorporating feedback to identify improvement opportunities
Interact with others	2.1, 2.4, 5.2	Participates in collaborative relationships with others to discuss own ideas and work directions, elicit feedback on completed work and identify improvement opportunities
Get the work done	1.1-1.3, 2.3, 2.4, 3.1-3.4, 4.1-4.4, 5.2	- Recognises potential of new approaches to enhance digital work practice and outcomes and invests some time looking for new opportunities, drawing on new methods to achieve different effects, self-directed experimentation with techniques, and analysis of the concepts and methods of other practitioners - Uses acquired technical knowledge and experience of digital image production to inform analytical decisions about the selection and extended use of resources, techniques and concepts to produce enhanced, original digital images - Implements safe, sustainable practices in set up and production of work and finalises image management to industry standards - Evaluates the effectiveness of creative and technical decisions to meet creative and technical goals - Uses feedback to inform improvement in future work

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUADIG405 Produce innovative digital images	CUVDIG401A Experiment with techniques to enhance digital images	Updated to meet Standards for Training Packages and clarify intent. Title changed. Minor edits to elements and performance criteria.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUADIG405 Produce innovative digital images

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- produce innovative digital images to engage viewers based on thorough research and experimentation of digital image techniques and media
- organise displays to present the creative works in best light
- document the creative process to record the discovery of ideas and techniques that may contribute to an individual style
- review own skills, performance and creative work for improvement

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the role of experimentation in developing and refining ideas for digital imaging and how this relates to the development of an individual style or voice
- explain ways to adapt, extend and combine the capabilities of a wide range of digital imaging technologies and techniques
- identify characteristics of different materials under different treatments and the potential of these characteristics to achieve different effects in work
- identify research methodologies used by creative practitioners
- explain how the works of other practitioners may be used to inform individual practice
- outline intellectual property issues and laws to be considered by independent arts practitioners
- describe practices and procedures for working safely and sustainably with materials, tools and equipment in a digital imaging work space.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- tools, equipment and materials required for producing video art
- relevant information sources.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUADIG501 Coordinate the testing of interactive media products

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to manage testing of interactive media products.

It applies to individuals who plan and co-ordinate the testing process, analyse the results, and write the reports. This is a central role working with the production team, including designers, authors, programmers and graphic artists.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Digital Content and Imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine criteria for testing	1.1 Define testing criteria to make sure that products meet technical and quality outcomes 1.2 Determine, with relevant personnel, production points at which development will be tested 1.3 Document and communicate testing criteria to relevant personnel
2. Plan approach for product testing	2.1 Identify various testing methods and their characteristics relevant for interactive media products

ELEMENT	PERFORMANCE CRITERIA
	2.2 Determine testing methods to be used, considering project specifications, budget and time 2.3 Discuss, with relevant personnel, the user profile appropriate for testing the interactive media product, if required 2.4 Develop and document a plan for testing products at specified points during development and on completion 2.5 Establish records system to document testing results
3. Test interactive media at specified production points	3.1 Coordinate testing of products at identified production points 3.2 Create materials to be used in tests if required 3.3 Instruct and coordinate personnel involved in the testing process 3.4 Apply methods to test that products meet creative, production and technical requirements 3.5 Analyse test findings for usability and/or design deficiencies in the product designs 3.6 Record problems and faults detected and the remedial steps taken 3.7 Document the testing process according to enterprise procedures 3.8 Evaluate final products against previously determined criteria 3.9 Report summarised evaluation to relevant production personnel
4. Evaluate testing process	4.1 Review effectiveness of testing methods 4.2 Evaluate the testing process and records system for improvements 4.3 Save and archive findings to inform subsequent projects

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 2.1, 2.4, 2.2, 3.6, 3.8, 4.1, 4.2, 4.3	Critically analyses and reviews test evaluation documents

Writing	1.3, 2.4, 2.5, 3.6, 3.7, 3.8, 4.2, 4.3	• Uses clear language and detailed text to document test criteria, test results and evaluation results • Documents reports, record systems and progress charts in a suitable format
Oral Communication	1.2, 1.3, 2.3, 3.3, 3.9	• Uses language and features appropriate to the audience to communicate test criteria, timeframes and key evaluation information • Uses questioning and listening techniques to clarify requirements
Navigate the world of work	1.1, 3.7	• Takes account of quality and industry practice when resolving testing problems • Ensures products adhere to quality requirements of the organisation
Interact with others	1.2, 1.3, 2.3, 3.3, 3.9	• Collaborates with others throughout all stages of the design process • Selects and uses appropriate practices and protocols to communicate test processes and results
Get the work done	1.1-1.3, 2.1-2.5, 3.1, 3.2, 3.4-3.6, 3.8, 3.9, 4.1-4.3	• Plans, organises and implements complex tasks for self and others • Analyses complex information to solve problems and make decisions • Uses digital tools for testing and record keeping

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUADIG501 Coordinate the testing of interactive media products	CUFDIG501A Coordinate the testing of interactive media products	Updated to meet Standards for Training Packages. Minor edits to performance criteria.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUADIG501 Coordinate the testing of interactive media products

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- document and communicate testing criteria to relevant personnel
- develop a plan for testing products that considers project specifications, budget and time
- establish and use a records system to document results
- conduct testing including:
 - creating any materials required
 - coordinating personnel
 - using testing methods that meet creative, production and technical requirements
- analyse test results
- compile reports and summaries of testing according to enterprise requirements
- review and document testing processes and methods.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline typical criteria used for testing interactive media products
- describe typical production points for testing interactive media products
- explain testing methods that might be used for particular interactive media products and describe how these are implemented
- outline the type of information that should be kept in a records system
- outline typical challenges of coordinating testing of interactive media products and how to handle them.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- interactive media products under development
- equipment used for testing.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUADIG502 Design digital applications

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to design digital applications, which may consist of one or many technologies integrated in various combinations.

It applies to individuals who work with clients to design specifications for digital applications, which are then built by other specialised team members. Digital applications may be operated in a web or mobile device environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Digital Content and Imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine project requirements	1.1 Analyse project brief to identify purpose of, and target audience for, digital applications 1.2 Consult with clients or relevant personnel to clarify project requirements, including project timelines 1.3 Identify target audience characteristics and determine how these influence design 1.4 Identify content and application functions and how these are

ELEMENT	PERFORMANCE CRITERIA
	accessed, searched and delivered
2. Research digital applications	2.1 Research digital applications and analyse how these meet audience, function and content requirements 2.2 Identify issues relating to delivery platform and technical and industry standards, and determine how these may affect digital application options 2.3 Consult relevant personnel to confirm all digital application options are considered 2.4 Select applications that will meet creative, production and technical requirements
3. Draft design specifications	3.1 Design architecture of digital application to show interrelationship of various components and screens 3.2 Specify interactive features, functionality and navigation 3.3 Identify content and data displays, and specify how these will be logically structured and integrated into and/or generated in the digital application 3.4 Specify levels of access permissions as required 3.5 Specify media assets as required 3.6 Specify user interfaces, taking screen sizes into account 3.7 Specify report generation if required 3.8 Specify production requirements, including appropriate testing strategies 3.9 Produce draft design specifications and instructions for design and development teams to use
4. Review and confirm design specifications	4.1 Use a range of techniques to present draft design specifications, and discuss with client 4.2 Review designs against creative and technical requirements, and client and audience needs 4.3 Adjust designs as necessary after discussions with relevant personnel 4.4 Clarify ownership of intellectual property to comply with production and organisational requirements 4.5 Confirm, with client, acceptance of design specifications, including deliverables, milestones and timelines

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.4, 2.1, 2.2, 3.1-3.9, 4.4	Selects and applies a range of reading strategies to interpret texts
Writing	3.1-3.9	Uses text, graphic diagrammatic and visual formats to draft and confirm specifications and instructions
Oral Communication	1.2, 2.3, 4.1, 4.5	- Participates effectively in spoken interactions using language and features appropriate to the audience - Uses questioning and listening strategies to confirm project requirements and elicit relevant feedback
Navigate the world of work	4.4	Understands and adheres to organisational and legislative requirements
Interact with others	1.2, 2.3, 4.1, 4.5	- Collaborates with others throughout all stages of the design process - Selects and uses appropriate practices and protocols to communicate with a range of audiences
Get the work done	1.1-1.4, 2.1-2.4, 3.1-3.6, 3.8, 3.9, 4.1-4.5	- Takes responsibility for planning, organising and implementing tasks required to complete project, coordinating with others when required - Analyses information to make decisions that affect the entire project - Uses digital tools to specify architecture, navigation and content to meet project brief specifications

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUADIG502 Design digital applications	CUFDIG502A Design web environments	Updated to meet Standards for Training Packages. Title changed. Minor edits to performance criteria.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUADIG502 Design digital applications

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- research digital applications and analyse how they meet audience, function and content requirements
- design specifications for digital applications that:
 - meet client and audience requirements
 - are technically feasible
 - detail all aspects of the application's permissions, search capability, architecture, content, assets, screen designs, functions, reports, production requirements and testing strategies
- present and discuss draft specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the sequence and interrelationships of stages in the process of designing digital applications
- outline issues relating to technical standards and platform functions that may impact on digital application options
- outline the impact of web standards on the design of digital applications
- describe typical formats and techniques for documenting the design of digital applications
- describe the concept of intellectual property rights and how this is managed in context of digital applications.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- project briefs on which designs can be based
- sample content.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUADIG503 Design e-learning resources

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to develop the design of e-learning resources in consultation with clients.

It applies to individuals who work in education or training organisations, or in media production companies that specialise in the development of e-learning resources.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Digital Content and Imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify project requirements	1.1 Refer to project briefs to identify target learner characteristics and their impact on resource design 1.2 Identify content to be incorporated, generated and managed, and how content is accessed or delivered 1.3 Identify delivery platforms including learning management systems, and assess implications for media asset formats and content modification 1.4 Consult with clients to clarify project requirements

ELEMENT	PERFORMANCE CRITERIA
2. Research and select instructional design model	2.1 Analyse content to establish learning outcomes and assessment strategies 2.2 Research a range of instructional design models and consider their suitability to meet briefs 2.3 Identify accessibility and technical standards that may apply for the delivery platforms 2.4 Identify learning styles of target audience and consider how these may impact design 2.5 Evaluate a range of interactive learning and assessment activities to meet learning needs of target learners 2.6 In consultation with relevant personnel, select the instructional design model that best meets learning needs and project requirements
3. Draft design specifications	3.1 Use selected instructional design model to design architecture of the e-learning resource 3.2 Design sequences and interactivity based on content and project requirements 3.3 Develop content templates for content experts if required 3.4 Specify media assets as required 3.5 Specify communication and collaboration tools as required 3.6 Specify user interface of the e-learning resource 3.7 Specify production requirements, including appropriate testing strategies 3.8 Produce design specifications and instructions for design and development teams to use
4. Finalise design specifications	4.1 Present design specifications and discuss with clients 4.2 Review designs against required project outcomes and target learner needs 4.3 Review designs against creative and technical requirements 4.4 Adjust designs as necessary after discussions with relevant personnel 4.5 Clarify ownership of intellectual property to comply with production and organisational requirements 4.6 Confirm with clients their acceptance of design specifications, including deliverables, milestones and timelines

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1-2.5, 3.2-3.8, 4.2-4.5	- Identifies and interprets relevant information including applicable legislation and organisational requirements - Integrates technical and descriptive information and ideas from a range of sources - Interprets project briefs to inform the process of designing e-learning resources
Writing	2.1, 3.1-3.8, 4.4	Uses text, diagrammatic and graphic formats to draft and confirm requirements and specifications
Oral Communication	1,4, 2.6, 4.1, 4.6	- Participates effectively in spoken interactions using language and features appropriate to the audience - Uses questioning and listening strategies to confirm project requirements and elicit relevant feedback
Navigate the world of work	4.5	Understands and adheres to organisational and legislative requirements
Interact with others	1,4, 2.6, 4.1, 4.6	- Collaborates with others throughout all stages of the design process - Selects and uses appropriate practices and protocols to communicate with a range of audiences
Get the work done	1.1-1.3, 2.1-2.6, 3.1-3.7, 4.2-4.6	- Adopts a methodical and logical approach to planning, organising and implementing tasks required to meet requirements - Generates complex creative ideas in alignment with the design brief - Takes responsibility for analysing information and making decisions to ensure designs meet all requirements - Uses digital tools to assist with the design of e-learning resources

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUADIG503 Design e-learning resources	CUFDIG503A Design e-learning resources	Updated to meet Standards for Training Packages. Minor edits to performance criteria.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUADIG503 Design e-learning resources

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- research and select suitable instructional design models to meet project requirements
- design specifications for e-learning resources for delivery on different platforms that:
 - meet the project brief, including learner requirements
 - are technically feasible
 - detail all aspects of e-learning resource architecture, interactive learning and assessment activities, media assets, communication and collaboration tools, user interface production requirements and testing strategies
- present and discuss design specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list and briefly describe instructional design learning models for e-learning
- outline target learner characteristics and how these may impact on instructional design choices
- list a range of e-learning delivery platforms, and briefly describe any particular design requirements
- outline typical media assets used for e-learning
- describe common formats and techniques for documenting design of e-learning resources
- outline the impact of web standards on the design of e-learning resources
- describe the concept of intellectual property rights and how this is managed in the context of e-learning resource development.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- project briefs on which designs can be based
- sample content.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUADIG504 Design games

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to design technically feasible games and document production requirements.

It applies to individuals who generate and develop a game idea through to documentation of the mechanics and design. They communicate the vision for a game to the rest of the team.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Digital Content and Imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify project requirements	1.1 Confirm objective and outcomes of a game proposal or brief in consultation with relevant personnel 1.2 Identify factors that may impact game's design 1.3 Clarify target audience to determine format and delivery platform of the game in discussion with relevant personnel
2. Research games and generate ideas	2.1 Identify and source a full range of genres, in consultation with relevant personnel 2.2 Select and play different genres as a source of inspiration,

ELEMENT	PERFORMANCE CRITERIA
	including traditional and state of the art games 2.3 Search game literature to identify various games' objectives and game theory 2.4 Generate a range of ideas for game designs that are technically feasible, respond to the proposal or brief, and provide creative solutions to design issues 2.5 Discuss ideas and creative solutions in collaboration with relevant personnel
3. Select a game genre	3.1 Identify a range of game genres with potential to meet the game brief, and present to relevant personnel for consideration 3.2 Select the game genre that meets the creative, technical and production requirements of proposal or brief in consultation with relevant personnel
4. Draft game design document	4.1 Propose a game concept that is original and compelling for users 4.2 Establish game strategy outcomes 4.3 Develop the structure of the game and document all elements, including style and game mechanics 4.4 Develop criteria to determine the scope of a prototype game sequence to be used in the development phase 4.5 Confirm the proposed prototype can test effectiveness of the game-play elements 4.6 Develop a register of game assets in consultation with relevant personnel 4.7 Use various presentation techniques to present a draft game design document for feedback from other team members
5. Finalise game design document	5.1 Review game design objectives based on feedback on the draft game design document 5.2 Discuss and confirm additional requirements or modifications to the game design with relevant personnel 5.3 Specify game production requirements, including appropriate testing strategies 5.4 Produce final game design document to reflect all additional requirements or modifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1- 2.4, 3.1, 3.2, 4.2-4.4, 5.1, 5.4	- Selects and critically analyses information from a variety of sources to clarify details and inform concept development - Integrates detailed information and ideas from a variety of sources
Writing	1.1, 1.3, 4.1-4.4, 4.6, 4.7, 5.1, 5.4	Uses text, diagrammatic and visual formats to develop detailed specifications and final documentation of game design analysis
Oral Communication	1.1, 1.3, 2.1, 2.5, 3.1, 3.2, 4.6, 4.7, 5.2	- Participates effectively in spoken interactions using language and features appropriate to the audience - Uses questioning and listening strategies to confirm project requirements and elicit relevant feedback
Numeracy	5.3	Uses estimation and other assessment skills and knowledge to incorporate financial and timeline calculations into production specifications
Interact with others	1.1, 1.3, 2.1, 2.5, 3.1, 3.2, 4.6, 4.7, 5.2	- Collaborates with others throughout all stages of the design process - Selects and uses appropriate practices and protocols to communicate with a range of audiences
Get the work done	1.1-1.3, 2.2-2.5, 3.1, 3.2, 4.1-4.7, 5.1-5.4	- Adopts a methodical and logical approach to planning, organising and implementing tasks required to meet requirements - Generates complex creative ideas in alignment with the design brief - Takes responsibility for analysing information and making decisions to ensure designs meet all requirements - Uses digital tools to assist with game design

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
CUADIG504 Design games	CUFDIG504A Design games	Updated to meet Standards for Training Packages. Minor edits to performance criteria.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUADIG504 Design games

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- research and generate ideas for games
- design games which:
 - are original and compelling for the user
 - are technically feasible
 - meet requirements of the game proposal or brief
- document all game aspects including strategy outcomes, style, mechanics and game assets
- specify a prototype game sequence that effectively tests game-play elements
- specify testing strategies
- present and discuss design specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the objectives and theories that underpin some common games
- identify and describe common traditional and digital game genres
- describe technical parameters of various platforms and their influence on game design
- explain the term 'game mechanics' in relation to game design
- list and describe strategies to test the function and operation of games
- describe formats for documenting and presenting game designs.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- game proposals or briefs on which designs can be based
- equipment and facilities for games design.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUADIG505 Design information architecture

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to design the information architecture of an interactive media product.

It applies to individuals who work collaboratively with clients and senior team members to develop content, structure and navigation of interactive media products. They also test the prototype.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual Communication – Digital Content and Imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify project requirements	1.1 Discuss design briefs with relevant personnel to clarify production requirements 1.2 Identify technical parameters of interactive media products, including the delivery platform, that may influence the architecture 1.3 Identify characteristics of target audience or users who will seek and search content 1.4 Assess content to be integrated into or generated by interactive

ELEMENT	PERFORMANCE CRITERIA
	media products
2. Classify and organise content	2.1 Research and select relevant thesaurus and metadata standards or tagging methodology 2.2 Organise and construct a content inventory, using classification techniques such as taxonomy or folksonomy, to detail levels of hierarchy 2.3 Assign content labels that are appropriate and meaningful for target audiences 2.4 Identify content search and browse requirements 2.5 Discuss proposed content classification with relevant personnel to confirm it meets project requirements
3. Draft information architecture design specifications	3.1 Sketch overall architecture, showing relationships and pathways between interactive content 3.2 Design forms that detail content input process, if required 3.3 Specify search functionality and search return displays 3.4 Construct wireframes of the content architecture and navigation pathways 3.5 Write draft design specifications and advice for development teams 3.6 Present draft design specifications for discussion and feedback from other team members 3.7 Amend draft design specifications to accommodate feedback as required 3.8 Discuss final draft design specifications with clients and adjust if necessary to meet project requirements
4. Finalise information architecture designs	4.1 Conduct usability testing using appropriate testing techniques 4.2 Incorporate changes to information architecture in design specifications based on test results 4.3 Obtain final agreement from relevant personnel for finished design

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2-1.4, 2.1, 2.2, 2.4, 3.1-3.5, 3.7	- Selects and critically analyses information from a variety of sources to clarify details and inform concept development - Integrates detailed information and ideas from a variety of sources
Writing	1.1-1.4, 2.2, 2.3, 3.1, 3.2, 3.5, 3.7, 4.2	- Develops detailed design specifications incorporating amendments and instructions for others - Applies labels that can easily be interpreted by target audience
Oral Communication	1.1, 2.5, 3.8	- Participates effectively in spoken interactions using language and features appropriate to the audience - Uses questioning and listening strategies to confirm project requirements and elicit relevant feedback
Interact with others	1.1, 2.5, 3.6, 3.8, 4.3	- Collaborates with others throughout all stages of the design process - Selects and uses appropriate practices and protocols to communicate with a range of audiences
Get the work done	1.1-1.4, 2.1-2.5, 3.1-3.8, 4.1-4.3	- Adopts a methodical and logical approach to planning, organising and implementing tasks required to meet requirements - Takes responsibility for analysing information and making decisions to ensure designs meet all requirements - Uses digital tools to assist with design tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUADIG505 Design information architecture	CUFDIG505A Design information architecture	Updated to meet Standards for Training Packages. Minor edits to performance criteria.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUADIG505 Design information architecture

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- research and organise content to meet project requirements
- develop design specifications to meet the project requirements, including:
 - sketches showing relationships and pathways
 - detailed wire frames
 - written specifications and advice for developers
- conduct usability testing on information architecture concept designs
- present and discuss design specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe application of taxonomy and folksonomy content classification techniques
- describe application of metadata standards to specific products
- explain the purpose of a thesaurus in organising content
- describe usability testing techniques relevant to information architecture design
- describe typical formats and techniques for documenting information architecture designs.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- interactive media proposals or briefs on which designs can be based

- sample content
- facilities and resources for testing information architecture designs.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAGRD301 Prepare files for publication

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to prepare electronic files for pre-press processing. It applies to files that still require some processing before printing or electronic distribution.

It applies to individuals who may provide administrative support or technical expertise when preparing their own files for publication as either hard or soft copy documents.

No licensing, legislative or certification conditions apply to this unit at the time of publication.

Unit Sector

Visual communication – graphic design

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Clarify formatting requirements	1.1 Review documented information about printing requirements and end use for text and image files 1.2 Plan work for pre-press requirements, including deadlines, in consultation with relevant people 1.3 Consider the requirements for different publication processes when planning work and selecting software
2. Prepare text for	2.1 Save text in correct format

ELEMENT	PERFORMANCE CRITERIA
pre-press processes	2.2 Review text to remove unnecessary formatting 2.3 Apply templates and styles as specified
3. Prepare graphics for pre-press processes	3.1 Complete scans at appropriate resolution 3.2 Use correct scanning curve 3.3 Save colour in required format 3.4 Complete basic manipulation of digital images as required 3.5 Ensure that combined images can be edited and adjusted 3.6 Check that all templates and styles have been applied correctly 3.7 Save final graphic images in the correct format
4. Finalise work	4.1 Evaluate final files for technical and visual accuracy and fitness for purpose 4.2 Use feedback from others to improve own skills in preparing files for publication 4.3 Submit files to relevant personnel within required deadlines 4.4 Make back-up copies of files in line with organisational procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	4.2	Demonstrates awareness of self as a learner by seeking the opinions of others to improve own skills
Reading	1.1, 1.2, 2.2, 3.6, 4.1, 4.4	- Interprets straightforward textual information from relevant sources to plan and complete tasks - Reviews text for accuracy and compliance with requirements
Writing	1.2	Records key information related to task requirements for personal use
Oral Communication	1.2, 4.2	Articulates clearly using relevant language to discuss requirements, and listening and questioning techniques to confirm understanding

Numeracy	3.1	Interprets numerical data to perform technical requirements
Navigate the world of work	3.6, 4.3, 4.4	Understands role and associated responsibility to complete work to required standards, timelines and organisational procedures
Get the work done	1.2, 1.3, 2.1-2.3, 3.1-3.5, 3.7, 4.1, 4.3, 4.4	- Plans and organises own workload taking production requirements into account and completing tasks in a logical sequence - Makes routine decisions about preparation and production of text and image files that meet technical and visual requirements and deadlines - Understands the purposes and functions of digital systems and tools and operates them effectively to complete required tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAGRD301 Prepare files for publication	CUVGRD301A Prepare files for publication	Updated to meet Standards for Training Packages and clarify intent.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAGRD301 Prepare files for publication

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- prepare text and graphic files that meet required output specifications for at least two hard copy and two soft copy jobs
- use reflection and feedback from others to review own work quality
- create and store back-up files according to requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify differences between hard copy and electronic publishing processes
- identify file formats for various outputs
- explain the importance of image resolution when preparing files
- list and briefly describe some image manipulation techniques
- outline basic colour systems used to prepare files for pre-press
- explain why styles and templates are used in pre-press work.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- documentation that specifies job requirements
- software to reproduce graphic designs
- interaction with relevant people.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAGRD302 Use typography techniques

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to use typography techniques in design work.

It applies to individuals working in many industries. They may provide administrative support within an enterprise, or they may work in specialist design and printing companies where print jobs vary from brochures and corporate stationery to artwork for billboards, display banners and textile products. At this level, work would be undertaken independently, but within established guidelines.

No licensing, legislative or certification conditions apply to this unit at the time of publication.

Unit Sector

Visual communication – graphic design

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to undertake typographic work	1.1 Identify requirements for typographic work in briefing documentation and clarify requirements with relevant personnel 1.2 Source reference material on typefaces and typography relevant to the brief 1.3 Confirm equipment, materials and work space requirements 1.4 Take into account printing or output considerations when

ELEMENT	PERFORMANCE CRITERIA
	planning work 1.5 Set up work space and equipment according to safety requirements and organisational procedures
2. Test and explore a range of typographical techniques	2.1 Identify possible approaches to typography design and establish criteria for the selection of a final approach 2.2 Select materials, tools and equipment to test approaches, styles and techniques 2.3 Trial typography techniques that may meet the requirements of the brief 2.4 Evaluate trials against criteria and select the preferred design approach
3. Complete typographic work	3.1 Develop the typographic work with the selected approach according to the brief 3.2 Review work in progress against project objectives and specifications 3.3 Seek and use feedback on work in progress to make adjustments to typographic work
4. Ensure quality of typographic work	4.1 Check spelling and grammar and ensure typography meets the technical production and/or printing requirements of the brief 4.2 Back up and store files and completed documentation according to organisational requirements 4.3 Present completed work within agreed time and quality parameters

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.5, 3.1, 3.2, 4.1, 4.2	- Interprets straightforward textual information from relevant sources to identify required information - Carefully proof reads typography for accuracy and compliance with specifications and identifies required corrections

Oral Communication	1.1, 1.3, 3.3	• Uses simple and relevant language to confirm information and requirements and seek feedback • Uses listening and questioning techniques to confirm understanding
Navigate the world of work	1.5, 4.2	• Takes personal responsibility for following safe work practices and organisational requirements when planning and completing tasks
Interact with others	1.1, 1.3, 3.3	• Follows accepted communication practices and techniques to confirm requirements and request feedback
Get the work done	1.2-1.4, 2.1-2.4, 3.1, 3.2, 4.2, 4.3	• Plans and implements routine and investigative tasks in a logical sequence • Analyses the scope of creative exploration required and evaluates the effectiveness of outcomes against established criteria • Selects final approach, reviews progress and refines work with input from others • Finalises work to meet organisational and project requirements and within established timeframes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAGRD302 Use typography techniques	CUVGRD302A Use typography techniques	Updated to meet Standards for Training Packages and clarify intent.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAGRD302 Use typography techniques

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- interpret briefs and source relevant reference information
- experiment with typography styles and techniques
- produce typography solutions that meet the creative and technical requirements of briefs and publishing processes
- perform quality checks and produce final product within timelines
- back up and store files according to requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the characteristics and uses of a range of typefaces
- describe work space requirements for typographic work, including selection and set-up of work space
- outline physical properties and capabilities of a range of materials, tools and equipment used for typographic work
- list typographic output devices and processes
- describe procedures for working safely with typographic equipment and materials.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- products that require the application of typographic techniques

- computers and software necessary to produce graphic designs
- opportunities for discussion and feedback.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAGRD401 Research and apply graphic design techniques

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to research and apply techniques to produce graphic design work. It involves interpreting work briefs, organising resources, testing ideas, and refining approaches to a range of design challenges.

It applies to individuals still developing a full range of skills. Research, experimentation and refinement are used to produce a range of general design works. Individuals generally produce work independently, with guidance as required.

No licensing, legislative or certification conditions apply to this unit at the time of publication.

Unit Sector

Visual communication – graphic design

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Interpret graphic design briefs	1.1 Interpret specifications in graphic design briefs and clarify issues with relevant people, as necessary 1.2 Take user or client requirements into account when making decisions about graphic design work 1.3 Consider parameters and constraints and clarify with relevant people as required

ELEMENT	PERFORMANCE CRITERIA
	1.4 Research contemporary and historical information relevant to briefs
2. Organise resources	2.1 Identify workspace, materials, tools and equipment required for graphic design work 2.2 Prepare and care for resources according to safety and organisational requirements 2.3 Follow storage and inventory procedures
3. Test graphic design approaches	3.1 Produce preliminary visual representations 3.2 Identify possible design approaches and establish criteria for selecting final approach 3.3 Select materials, tools and equipment and test approaches and techniques 3.4 Evaluate test outcomes against criteria and select the best approach for the requirements of briefs 3.5 Review own work and seek feedback as required 3.6 Refine and document the design approach based on results of testing and evaluation
4. Produce graphic design work	4.1 Create graphic designs using selected design approach 4.2 Respond to feedback and refine graphic design work 4.3 Present finished work within agreed work parameters

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.4, 2.3	Interprets detailed textual and visual information to inform ideas and determine design requirements
Writing	3.6	Uses clear language and industry related terminology to document idea development, testing and evaluation outcomes
Oral Communication	1.3, 3.5, 4.2	- Articulates using clear and direct language to determine requirements and seek feedback - Uses listening and questioning techniques to confirm

		understanding
Navigate the world of work	2.2, 2.3	Takes responsibility for safe use and maintenance of resources and follows required procedures for their registration and storage
Interact with others	1.3, 3.5, 4.2	Selects and uses appropriate communication conventions and techniques to confirm requirements and request feedback from others
Get the work done	1.2, 2.1-2.3, 3.1-3.4, 3.6, 4.1-4.3	- Plans, organises and completes work to meet established time requirements - Identifies resources suited to a range of graphic design work and analyses task requirements to make appropriate choices - Analyses the scope of exploratory techniques required and critically evaluates effectiveness of test samples against established criteria for designs - Determines final design choice based on test results and client requirements - Produces, refines, documents and presents final graphic design solutions that meet creative and technical requirements

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAGR401 Research and apply graphic design techniques	CUVGR401A Research and apply graphic design techniques	Updated to meet Standards for Training Packages and clarify intent.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAGR401 Research and apply graphic design techniques

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- interpret information in briefs and related research
- select and care for required resources
- test graphic design methods and techniques and document outcomes and design approaches
- produce examples of graphic design work that meet the requirements of a range of briefs.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the use of experimentation in developing and refining graphic design work
- explain the importance of researching information about graphic design when completing design work
- explain typical information found in graphic design briefs
- discuss typical parameters and constraints that need to be considered when interpreting design briefs, including intellectual property considerations, and availability of resources, time and budget
- identify common techniques, materials, tools and equipment used in graphic design
- briefly describe the health and safety requirements related to establishment of work space and use of materials and equipment for graphic design work.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- graphic design briefs
- information sources for graphic design research
- equipment and tools used to produce graphic design work
- opportunities for discussion and feedback.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAGRD504 Create and manipulate graphics

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to create and manipulate graphics using a combination of creative design skills and technical software proficiency.

It applies to individuals working in various industries such as graphic design, commercial printing, advertising, publishing, television and marketing. Individuals work independently and create original graphics or work with graphic objects created by others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual communication – graphic design

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Analyse design needs	1.1 Confirm communication objectives for the graphics work based on the design brief and consultation with relevant people as required 1.2 Evaluate design brief specifications 1.3 Source and evaluate legal, ethical and contractual information pertinent to the project
2. Develop and refine ideas for graphics	2.1 Identify relevant sources and conduct research to inform ideas for graphics

ELEMENT	PERFORMANCE CRITERIA
	2.2 Consider the opportunities and constraints offered by different techniques and technologies 2.3 Assess the relationship of the graphic objects to the other components of the design 2.4 Create and refine ideas and options for layouts 2.5 Refine ideas using technical experimentation 2.6 Evaluate and select approaches that meet the communication need 2.7 Produce and present visual representations of design ideas to others for their approval
3. Manipulate graphic objects	3.1 Create graphic objects based on selected ideas 3.2 Manipulate, edit and enhance objects using an extended range of digital tools and features 3.3 Integrate graphics with other visual design elements 3.4 Identify and resolve technical problems based on developing expertise 3.5 Achieve desired outcomes through application of design skills and technical expertise 3.6 Establish and follow safe work practices in the work process
4. Finalise technical aspects of graphics work	4.1 Edit and refine graphics to meet technical requirements 4.2 Follow correct protocols for saving, exporting and storing files 4.3 Establish appropriate file formats for output
5. Evaluate graphics work	5.1 Critique graphics from both a technical and aesthetic perspective in the context of the design objectives 5.2 Seek feedback from others as required, and make appropriate adjustments

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description

Reading	1.1-1.3, 2.1, 4.2	Interprets and evaluates complex textual and visual information from a range of sources to identify content relevant to own work
Oral Communication	1.1, 2.7, 5.2	- Participates in discussions using active listening and questioning techniques to seek feedback and confirm understanding of design requirements - Presents detailed information using language, tone and pace appropriate to audience and purpose
Navigate the world of work	1.3, 3.6	- Considers legal requirements and responsibilities when planning responses to design briefs - Takes responsibility for establishment and adherence to safe work practice
Interact with others	1.1, 2.7, 5.2	Selects and uses appropriate communication methods and practices to identify shared goals, seek feedback and present information to others
Get the work done	2.1-2.7, 3.1-3.5, 4.1-4.3, 5.1, 5.2	- Takes responsibility for management and sequence of tasks and processes within own workload - Invests time in developing options using a combination of creative and critical thinking and exploratory techniques to manipulate graphics before production of preliminary visuals - Makes intuitive and analytical decisions using design skills, and software tools and features to finalise the production of refined graphics that meet aesthetic and technical requirements - Reviews effectiveness of aesthetic and technical decisions to meet objectives with input from others - Considers purpose when selecting and using digitally based technology and applications to effectively realise graphics for output in appropriate file formats

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAGRD504 Create and manipulate graphics	CUVGRD504A Create and manipulate graphics	Updated to meet Standards for Training Packages and clarify intent.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAGR504 Create and manipulate graphics

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- analyse graphics requirements in briefs and other information sources
- develop and present ideas for graphics
- create original graphics for at least two different graphic design projects
- use an extended range of tools and features of relevant software with a high level of technical proficiency
- integrate technical and creative processes to produce outcomes that meet design objectives
- evaluate the technical and aesthetic effectiveness of graphics work.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the use of graphics within different types of communication, including corporate, editorial and promotional communication
- identify sources of information for developing ideas about different graphics options
- identify the current range of software programs available to graphic designers and discuss the tools and features
- identify the different types of graphic file formats and explain their use in different contexts
- explain technical requirements for the manipulation and formatting of visual components and file types, including:
 - bitmap images
 - charts
 - graphics

- page layouts
- text
- vector graphics
- outline file management protocols and procedures for a range of print and web-based publications
- explain key safety requirements for the use of computer and keyboard.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- industry standard briefs for graphics work
- relevant information sources
- opportunities to present ideas to others
- industry-current graphic design software.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAGRD505 Design and manipulate complex layouts

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to design complex publication layouts by combining creative design skills with technical software proficiency.

It applies to individuals working in various industry contexts such as graphic design, commercial printing, advertising, publishing, television and marketing. At this level, individuals work independently and are responsible for the overall layout design.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Visual communication – graphic design

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Analyse design needs	1.1 Confirm communication objectives for the publication based on the design brief and consultation with relevant people 1.2 Evaluate particular specifications of the design brief 1.3 Source and evaluate legal, ethical and contractual information pertinent to the project
2. Develop and refine layout ideas	2.1 Identify relevant sources and conduct research to inform layout ideas

ELEMENT	PERFORMANCE CRITERIA
	2.2 Consider the opportunities and constraints offered by different techniques and technologies 2.3 Assess the different elements that need to be incorporated into the overall layout 2.4 Create and refine ideas and options for layouts 2.5 Refine ideas using technical experimentation 2.6 Evaluate and select approaches based on their potential to meet the communication need 2.7 Produce and present visual representations of design ideas to others for their approval
3. Create and manipulate layouts	3.1 Set up the document using the capabilities of appropriate software 3.2 Manipulate and enhance the layout through use of an extended range of tools and features 3.3 Support communication objectives with effective integration of text and visuals 3.4 Identify and resolve technical problems based on developing expertise 3.5 Apply design skills and technical expertise to achieve desired outcomes 3.6 Enhance outcomes by working creative and technical processes together 3.7 Establish and follow safe work practices in the work process
4. Evaluate design work	4.1 Critique the layout from functional and aesthetic perspectives in the context of the design objective 4.2 Seek feedback from others as required, and make appropriate adjustments 4.3 Make assessment of own work and identify key learnings to inform future work
5. Finalise technical aspects	5.1 Edit and refine layouts to meet technical requirements 5.2 Follow correct protocols for saving, exporting and storing files 5.3 Establish appropriate file formats for output and appropriate colour management profiles

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1, 4.1,	Interprets and evaluates complex textual and visual information from a range of sources to identify content relevant to own work
Oral Communication	1.1, 2.7, 4.2	- Participates in discussions using active listening and questioning techniques to confirm understanding of design requirements and seek feedback from others - Presents detailed information using language, tone and pace appropriate to audience and purpose
Navigate the world of work	1.3, 3.7	- Considers legal requirements and responsibilities when planning responses to design briefs - Takes responsibility for establishment and adherence to safe work
Interact with others	1.1, 2.7, 4.2	Selects and uses appropriate communication methods and practices to identify shared goals, seek feedback and present information to others
Get the work done	1.3, 2.1-2.7, 3.1-3.6, 4.1-4.3, 5.1- 5.3	- Takes responsibility for planning and managing tasks and processes within own workload - Invests time in developing options using a combination of creative and analytical thinking, technical exploration and design refinement before production of preliminary layout visuals - Makes intuitive and analytical decisions about manipulation and integration of text and type into layouts that meet aesthetic and communication requirements, solving technical problems as they arise - Reviews effectiveness of aesthetic and technical decisions to meet objectives with input from others, and appraises design solutions for opportunities to inform future work - Considers purpose when selecting and using software tools to develop and refine visual information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAGRD505 Design and manipulate complex layouts	CUVGRD505A Design and manipulate complex layouts	Updated to meet Standards for Training Packages and clarify intent.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAGR505 Design and manipulate complex layouts

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- analyse layout requirements in briefs and other information sources
- develop and present layout concepts
- create original designs for the layout of at least two publications
- use an extended range of tools and features of relevant software with a high level of technical proficiency
- integrate technical and creative processes to produce outcomes that meet design objectives
- evaluate the effectiveness of layouts.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain common features and formats of different types of publications
- identify sources of information for developing ideas about different layout options
- explain interrelationships between different visual design components within a complex layout
- identify the current range of software programs available to graphic designers and explain the opportunities and constraints of their application to different technologies
- identify different graphic file formats and explain how and why these are used in different contexts
- explain technical requirements for the manipulation and formatting of visual components and file types
- discuss file management protocols and procedures for a range of publications, both print and web-based
- explain key safety requirements for the use of computer and keyboard.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- briefs for complex layout work
- information sources
- opportunities to present ideas to others
- graphic design software.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAPHI513 Employ colour management in a digital imaging workplace

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to manage the integrity of colour across digital imaging devices.

It applies to individuals who apply self-directed technical skills and knowledge to manage the accuracy and consistency of colour in digital and hybrid (digitised or scanned film or print) work processes.

No licensing, legislative or certification conditions apply to this unit at the time of publication.

Unit Sector

Visual communication – photo imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Research principles and techniques for control of digital colour	1.1 Identify charts, measurements, spaces, models and systems, and industry standards relevant to colour in digital imaging contexts 1.2 Examine how colour is created, defined and managed in digital imaging devices 1.3 Investigate areas of capture, display, output and archive spaces in digital imaging devices 1.4 Document sources of information on colour management and

ELEMENT	PERFORMANCE CRITERIA
	standards
2. Apply colour management systems	2.1 Identify and select appropriate calibration devices, profiling techniques and closed loop systems for managing colour in specific digital imaging devices 2.2 Evaluate selected colour management systems and techniques for suitability and cost efficiency 2.3 Adopt and adapt selected colour management systems to digital workplace
3. Review and update colour management strategies	3.1 Review performance and assess impact of adapted colour management systems and strategies in digital workplace 3.2 Develop systems to update and respond to future colour management systems and strategies as they arise from emerging technologies and workplace practices

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.3	Interprets and evaluates complex technical and theoretical information for application to colour management in digital imaging work practice
Writing	1.4	Records sources of information and required standards for future use
Numeracy	2.2	Calculates the cost efficiency of processes and techniques
Navigate the world of work	1.1	Meets workplace expectations to apply industry colour management standards to digital imaging work
Get the work done	1.1-1.3, 2.1-2.3, 3.1, 3.2	- Plans, organises and undertakes tasks required to investigate the application and operation of colour management processes and technologies - Researches colour management systems to inform critical decisions about selection, adaptation and use of systems and techniques in own digital workplace - Reviews the effectiveness of decisions to implement

		and refine colour management processes in the workplace • Establishes processes to maximise opportunities and responses to changes in colour management systems and strategies as they evolve

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAPHI513 Employ colour management in a digital imaging workplace	CUVPHI529A Employ colour management in a digital imaging workplace	Updated to meet Standards for Training Packages. Minor edits to elements and performance criteria.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAPHI513 Employ colour management in a digital imaging workplace

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- document research into the principles and techniques of digital colour management
- evaluate digital colour management systems and strategies, and select a system to apply in a digital imaging context
- manage digital colour across a range of digital devices to achieve consistent quality in products
- evaluate outcomes and document ways to respond to future changes or opportunities.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain how colour is created, defined and managed in digital imaging devices
- describe how common colour charts, spaces, measurement, systems and models are used in photo imaging
- outline the key industry standards that apply to colour measurement and management
- describe typical issues that may arise in managing digital colour and briefly outline solutions
- identify trends and emerging technologies that may have impact on colour management systems.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- an environment where a range of digital imaging devices and colour management systems can be applied.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAPHI514 Prepare digital images for pre-press processing

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to prepare client image files for pre-press processing.

It applies to individuals who possess the self-directed skills and knowledge to process image files prior to printing.

No licensing, legislative or certification conditions apply to this unit at the time of publication.

Unit Sector

Visual communication – photo imaging

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Consult with pre-press bureau about formatting requirements	1.1 Source printing requirements from relevant personnel and follow throughout preparation process 1.2 Obtain relevant specifications for software and image file formatting from relevant personnel 1.3 Discuss and resolve with relevant personnel any constraints associated with different printing processes and other diffusion techniques
2. Prepare files for	2.1 Prepare image files using appropriate pre-press processing

ELEMENT	PERFORMANCE CRITERIA
pre-press processing	techniques 2.2 Choose suitable test charts or targets and print to appropriate specifications for ink density and stock on linearised proofer 2.3 Calibrate digital proofing device to examine test charts and use results to generate colour profile 2.4 Print test file on calibrated digital proofing device and use results to generate output profile for press and stock 2.5 Produce sample image, confirm with relevant personnel and modify if required 2.6 Optimise images and output image product to profile specifications using industry standards 2.7 Save image files in appropriate format for pre-press processing and prepare invoice or account for client 2.8 Assemble completed images for electronic or physical dispatch and deliver with invoice or account to agreed location by appropriate methods within agreed timeframe
3. Wrap up and review print preparation	3.1 Catalogue and archive images according to industry standards 3.2 Review feedback from relevant personnel on final printed product 3.3 Maintain contractual and financial records for business and taxation purposes 3.4 Evaluate own performance in job context and identify future improvements 3.5 Identify future opportunities, work directions, equipment needs and workflow changes resulting from job

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 2.2, 2.3	- Interprets and evaluates technical specifications and guidelines - Checks results of test charts to inform colour profile

Writing	1.1, 1.2	Accurately records information from a range of sources
Oral Communication	1.1-1.3, 2.5	- Participates in complex discussions with technical experts using language and features appropriate to the audience - Uses effective listening and open questioning to clarify and confirm complex information
Numeracy	2.7	Calculates account fees for invoices
Navigate the world of work	2.6, 3.1, 3.3, 3.4	- Takes responsibility for compliance with industry standards and legislative requirements applicable to own work role - Understands workplace expectations and evaluates own performance in meeting these expectations
Interact with others	1.1-1.3, 2.5	Selects and uses appropriate communication methods and practices to participate in discussions about pre-process requirements
Get the work done	1.1-1.3, 2.1-2.8, 3.1-3.5	- Uses methodical planning processes to prepare, optimise and save image files in appropriate formats - Stores and maintains images and records according to requirements - Makes decisions that require understanding of printing techniques and test processes - Reviews outcomes and feedback from others to determine future requirements and opportunities for change - Uses digital tools to create and store files

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAPHI514 Prepare digital images for pre-press processing	CUVPHI530A Prepare digital images for pre-press processing	Updated to meet Standards for Training Packages and clarify intent.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAPHI514 Prepare digital images for pre-press processing

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- use appropriate pre-press processing techniques to prepare digital images according to printing requirements
- manage colour in pre-press processing
- produce required test files and samples
- correctly save and archive completed images
- evaluate outcomes and identify future improvements or opportunities.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the important aspects of colour management during pre-press processing
- outline equipment, tools and materials required for pre-press processing
- summarise the technique for pre-press processing of images
- explain different printing and diffusion techniques and their constraints with respect to design
- explain why stock and press are considered as part of pre-press
- outline systems used to catalogue and archive photo images and business records.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- an environment in which where digital image files can be prepared for pre-press processing
- suitable equipment and materials.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

CUAPPR401 Realise a creative project

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to experiment with ideas and techniques to find an individual style or voice throughout a creative project that results in a completed work.

It applies to individuals who have sound technical, conceptual and theoretical skills in a particular area of creative practice, often at a pre-professional level.

No licensing, legislative or certification conditions apply to this unit at the time of publication.

Unit Sector

Industry capability – professional practice

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Develop ideas for creative project	1.1 Identify and analyse sources that inform ideas for work 1.2 Explore and identify ideas using visual representation and design tools 1.3 Challenge identified ideas, engaging with others as required 1.4 Identify possible project constraints, based on nature and purpose of work 1.5 Refine and select options based on own analysis and

ELEMENT	PERFORMANCE CRITERIA
	communication with others
2. Plan the creative project	2.1 Confirm scope and objectives of the work in consultation with relevant people as required 2.2 Organise financial, physical and other resources 2.3 Evaluate safety and sustainability considerations for the project 2.4 Identify options for documenting and recording work and the ideas and research that inform it
3. Create finished work	3.1 Adapt and extend skills in manipulating selected materials, processes and technologies to fulfil project objectives 3.2 Evaluate creative work in progress and respond to conceptual and technical issues by adjusting work as required 3.3 Monitor project workflow against the plan 3.4 Apply safe and sustainable work practices relevant to chosen creative form 3.5 Document the production of work using approaches suitable to chosen creative form
4. Evaluate own work	4.1 Analyse own work in terms of conceptual development, technical execution and professional potential 4.2 Identify areas for future improvement especially in terms of own technical skills in particular creative form 4.3 Evaluate efficiency and effectiveness of overall work process 4.4 Seek input from others as required and respond positively to feedback

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	4.1, 4.2	Reviews own technical skills and performance and identifies areas for ongoing and future skill development
Reading	1.1, 2.1, 3.2	Interprets information in a variety of forms regarding

		at times complex or abstract ideas, and uses the knowledge gained to evaluate possibilities and methodologies
Writing	3.5	Develops material for a specific audience using clear and detailed language in order to convey explicit processes, requirements and ideas
Oral Communication	1.3, 2.1, 4.4	- Participates in a verbal exchange of ideas regarding conceptual and technical issues in creative work, using appropriate, detailed and clear language - Uses listening and questioning skills to discuss scope and objectives of the work with key others
Numeracy	2.2, 3.3, 4.3	- Calculates with whole numbers and routine fractions, decimals or percentages to determine project costs - Selects, totals and orders required resources within project's budgetary and time constraints
Navigate the world of work	2.3, 3.4	Identifies, evaluates and follows explicit responsibilities throughout the project
Interact with others	1.3, 2.1, 4.4	Uses appropriate communication practices to discuss ideas and work with others
Get the work done	1.2, 1.4, 1.5, 2.2, 2.4, 3.2, 3.3, 4.2, 4.3	- Plans and organises methodologies and resource requirements according to creative vision - Experiments with a range of techniques and tools in the development of work, and acts on opportunities for refinement - Recognises and takes responsibilities for addressing challenges and opportunities to refine work - Takes responsibility for the outcomes of decision-making processes and actively contributes to decision-making processes when required - Evaluates effectiveness of decisions in terms of how well the stated goals are met

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAPPR401 Realise a creative project	CUVPRP401A Realise a creative project	Updated to meet Standards for Training Packages and clarify intent.	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
		Minor edits to elements and performance criteria.	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAPPR401 Realise a creative project

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Performance Evidence

Evidence of the ability to:

- take responsibility for the complete process of planning and producing a creative project
- develop and refine conceptual and technical skills through a demonstrated process of exploration and experimentation
- produce creative work that reflects an emerging individual style, using safe and sustainable work practices
- document the creative work from initial idea to realisation in a format suitable to creative form
- communicate effectively with others about ideas and created work, integrating constructive feedback
- evaluate efficiency and effectiveness of completed creative project process.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise the relationship between technique, materials and process in the relevant creative form
- discuss typical problems that occur during the development of a creative project, and how to avoid or resolve them
- describe commonly used research methodologies for creative practitioners
- describe current and emerging practices for documenting work in a creative context
- outline basic project management techniques, particularly in relation to work planning, time management and resource management
- discuss intellectual property issues and legislation associated with professional creative practice

- summarise sustainability issues associated with the tools and materials used in the chosen creative form
- outline work health and safety procedures in relation to chosen creative form.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- resources for producing the creative work, including work space, tools, equipment and materials
- studio and workshop facilities.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

ICPCBF105 Operate in-line mail machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely monitor and operate an intelligent in-line cut sheet form feeder, folder and inserter mail machine, and correctly offload, pack and label completed mail for distribution.

It applies to individuals working in a mail house environment under direct supervision and performing mainly routine tasks such as monitoring machinery operations and reporting production faults.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Monitor operation	1.1 Job is checked for sign-off by printers and ready for mailing procedures 1.2 Machine is jogged to ensure correct positioning and hopper feed operation 1.3 All units are monitored to ensure optimum operation

ELEMENT	PERFORMANCE CRITERIA
	1.4 Envelopes are manipulated and fanned to ensure they move efficiently through the machine 1.5 Folds, inserts and envelopes are continuously monitored for defects, and defects are put aside for remake 1.6 Materials are checked and hoppers reloaded as required
2. Check quality	2.1 Mail is monitored to ensure quality standards are met 2.2 Supervisor is contacted when quality standards are not met 2.3 Sequence is monitored according to job specifications 2.4 Number of spoils are documented according to enterprise procedures
3. Pack envelopes	3.1 Completed envelopes are unloaded and checked for quality 3.2 Completed packages are packed into labelled trays and Australia Post labels are affixed according to job specifications 3.3 Sequence numbers and postcodes are in correct pre-sort order ensuring job continuity 3.4 Job is reconciled and documented and supervisor is notified if job does not reconcile

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.3, 2.4, 3.2	- Recognises text within job specifications and follows written instructions - Checks accuracy of labelled information against written instructions
Writing	2.4, 3.4	Documents information required for records
Oral Communication	2.2, 3.4	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	2.4, 3.3	Uses simple mathematical calculations and arranges sequential numerical information

Oral Communication	2.2, 3.4	Identifies and reports discrepancies and production faults to supervisor/s
Navigate the world of work	1.1, 2.1, 2.4, 3.1	Follows explicit procedures immediately related to role
Interact with others	2.2, 3.4	Follows accepted communication practices for reporting issues when seeking advice
Get the work done	1.1-1.6, 2.1, 2.3, 3.1-3.4	- Follows pre-determined plans for tasks with multiple steps - Initiates standard procedures when responding to familiar problems within immediate context - Uses digital systems and tools to complete routine tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF105 Operate in-line mail machine	ICPCF105C Operate in-line mail machine	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF105 Operate in-line mail machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly complete TWO jobs involving multiple inserts on an in-line mail machine according to job specifications and enterprise procedures
- safely operate and demonstrate all safety devices on an in-line mail machine
- correctly monitor production and notify supervisor when problems arise.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain setup procedures to meet work health and safety and enterprise requirements
- explain the quality check process
- identify waste disposal procedures relevant to task
- explain documentation requirements, where the documents are kept, and the information included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include use of an in-line cut sheet form feeder, folder and inserter machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF202 Handline mail

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manually collate and insert irregular and bulky mail documents.

It applies to individuals working in a mail house environment under direct supervision and performing mainly routine and repetitive tasks such as matching inserts, verifying data and reporting discrepancies and faults.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Collate materials	1.1 All materials required for the job are checked and confirmed against job specifications 1.2 Materials are changed or adapted according to job specifications 1.3 Materials are arranged to make manual collation as easy and safe as possible 1.4 Collated materials are correct and in sequence, and any faulty materials are

	removed and documented 1.5 If required, items are decollated according to job specifications 1.6 Manual wrapping of materials is completed, if required according to job specifications
2. Match inserts	2.1 Collated data is correctly matched to addressee 2.2 Address information is verified as accurate 2.3 Random checks are performed to ensure quality is met 2.4 Discrepancies are reported to supervisor 2.5 Envelopes or packs are glued or sealed according to job specifications
3. Reconcile output	3.1 Total number of throughputs matches job specifications 3.2 Destination delivery unit rate matches the job specifications and meets Australia Post standards 3.3 Information matching trail is documented 3.4 Correct procedures for control of materials are followed 3.5 Discrepancies are reported to supervisor

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.5, 1.6, 2.1, 2.2, 2.5, 3.1, 3.2	- Recognises text within job specifications and follows written instructions - Verifies accuracy of information
Writing	1.4, 3.3, 3.5	Records information related to outcomes of job according to organisational requirements
Oral Communication	2.4, 3.5	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	3.1, 3.2	Uses simple mathematical calculations and arranges sequential numerical information
Navigate the world of work	1.3, 3.2, 3.4	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with	2.4, 3.5	Follows accepted practices and protocols for

others		reporting issues to supervisors
Get the work done	1.1-1.6, 2.1-2.5, 3.3-3.5	- Follows clearly sequenced instructions and monitors own progress, seeking assistance when necessary - Responds to predictable problems and implements standard or logical solutions related to own job role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF202 Handline mail	ICPCF202C Handline mail	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF202 Handline mail

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- manually collate and insert irregular and bulky mail or packages according to job specifications and within production timeframe, removing any spoils or faulty work, and reporting discrepancies to supervisor.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain setup procedures to meet work health and safety and enterprise requirements
- explain the quality check process
- identify waste disposal procedures relevant to this task
- explain documentation requirements, where the documents are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF203 Collate and insert mail manually

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manually collate and insert mail documents and verify product output.

It applies to individuals working in a mail house environment performing routine activities with some accountability for quality of outcomes.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Collate inserts	1.1 Inserts required for job are checked and confirmed against job specifications 1.2 Inserts are arranged to make manual collation as easy and safe as possible 1.3 Collated inserts are correct and in sequence
2. Match inserts	2.1 Collated data is correctly matched to addressee 2.2 Address information is verified as accurate 2.3 Bar code information is checked for correct sequence of

ELEMENT	PERFORMANCE CRITERIA
	addressees to collated information where relevant 2.4 Discrepancies are reported to supervisor
3. Reconcile output	3.1 Total number of throughputs matches job specifications 3.2 Destination delivery unit rate matches job specifications 3.3 Information matching trail is documented 3.4 Correct procedures for control of materials are followed 3.5 Discrepancies are reported to supervisor

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1-2.3, 3.1, 3.2	- Recognises text within job specifications and follows written instructions - Checks accuracy of labelled information against written instructions
Writing	2.4, 3.3, 3.5	Records information according to organisational requirements
Oral Communication	2.4, 3.5	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	3.1, 3.2	Recognises and organises sequential numerical data
Navigate the world of work	1.2, 3.4	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	2.4, 3.5	Follows accepted practices and protocols for reporting issues to supervisors
Get the work done	1.1-1.3, 2.1-2.4, 3.1-3.5	- Plans, identifies and assembles resources required to complete tasks - Sequences steps involved in clearly defined, familiar tasks and sets up simple strategies to track progress - Responds to predictable problems and implements standard or logical solutions, seeking assistance when

		necessary

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF203 Collate and insert mail manually	ICPCF203C Collate and insert mail manually	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF203 Collate and insert mail manually

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly collate and insert mail documents manually and reconcile TWO full jobs according to job specifications and within production timeframes.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain setup procedures to meet work health and safety and enterprise requirements
- explain the quality check process
- identify waste disposal procedures relevant to this task
- explain documentation required, where the documents are kept, and the information in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF204 Operate addressing machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to operate an addressing machine, monitor production for problems and correctly pack mail at process completion.

It applies to individuals working in a mail house environment under direct supervision, with some accountability for quality of outcomes including checking and cleaning materials and equipment, and clearing the machine of materials and waste.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1.Job specifications are read and interpreted from job documentation or process control system 1.2 Job is signed off by printers and ready for mailing procedures 1.3 Materials are checked and in correct order for job, and all sheets are in correct position for barcode scanning if required 1.4 Blades are sharp and correctly fitted, and water for gluing is available

ELEMENT	PERFORMANCE CRITERIA
	1.5 All tracks and conveyor belts are clean and clear 1.6 Work area is safe and ready for production according to safety requirements
2. Monitor operation	2.1 Machine is jogged to ensure correct positioning and hopper feed operation 2.2 All units are monitored to ensure optimum operation 2.3 Mail is monitored to ensure it moves efficiently through the machine 2.4 Materials are checked and hoppers reloaded as required 2.5 Adjustments are made when quality standards are not met 2.6 Quality is monitored according to job specifications 2.7 Number of spoils are documented according to enterprise procedures
3. Identify and rectify problems	3.1 Sequence, placement or gluing errors are identified and changes made to guides or on the console as required 3.2 Tracks, conveyors and gluer are cleaned and cleared if lags and jams occur 3.3 Faulty performance of equipment is identified and reported according to enterprise procedures 3.4 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards
4. Pack mail	4.1 Addressed mail is unloaded and quality checked 4.2 Completed packages are packed into labelled trays and Australia Post labels are affixed according to job specifications 4.3 Sequence numbers and postcodes are in correct pre-sort order ensuring job continuity 4.4 Job is reconciled and documented and supervisor is notified if job does not reconcile 4.5 Machine is cleared and stock put away

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.6, 4.2	- Recognises text within job specifications and follows written instructions - Checks accuracy of labelled information against written instructions
Writing	1.2, 2.7, 3.3, 4.4	Records information related to outcomes of job according to organisational requirements
Oral Communication	3.3, 4.4	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	2.7, 4.3	Uses simple mathematical calculations and arranges sequential numerical data
Navigate the world of work	1.2, 1.5, 1.6, 2.5, 2.7, 3.2-3.4	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	3.3, 4.4	Follows accepted practices and protocols for reporting issues to supervisors
Get the work done	1.1, 1.3, 1.4, 2.1, 2.4-2.6, 3.1-3.4, 4.1-4.5	- Follows clearly defined instructions, and monitors own progress on tasks, seeking assistance when necessary - Responds to predictable problems and implements standard or logical solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF204 Operate addressing machine	ICPCF204C Operate addressing machine	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF204 Operate addressing machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly complete TWO jobs according to job specifications and enterprise procedures, ensuring addresses are affixed securely and in correct position, and any production problems are fixed with minimum downtime
- operate all safety devices on the machine.

If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain setup procedures to meet work health and safety and enterprise requirements
- explain the quality check process
- identify waste disposal procedures relevant to this task
- explain documentation required, where they are kept, and the information included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to a Cheshire labelling machine and special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF208 Set up and operate a cheque mailer machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely set up, operate and monitor a cheque mailer machine including rectifying any production faults. The individual off-loads completed books and correctly packs and completes reconciliation requirements.

It applies to individuals working under direct supervision performing mainly routine tasks, operating machinery and completing production requirements according to job specifications and internal procedures.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or process control system 1.2 Books are checked and in correct order and position for job 1.3 First and last name listings are checked as correct 1.4 Correct envelopes are obtained from enterprise storage area and water container is checked

ELEMENT	PERFORMANCE CRITERIA
	1.5 Envelopes are correctly loaded and hopper guides adjusted according to job specifications 1.6 Books are correctly loaded and book feeder adjusted according to job specifications 1.7 All feeders and conveyor belts are clean and clear 1.8 Work area is safe and ready for production according to safety requirements
2. Monitor operation	2.1 Machine is jogged to ensure correct positioning and hopper feed operation 2.2 Books and envelopes are replenished to ensure continuous supply 2.3 Books and envelopes are continuously monitored for faulty work and put aside securely for remake
3. Reconcile job	3.1 Sequence of names is checked against job specifications/listing sheet 3.2 Number of spoils are documented according to enterprise procedures 3.3 Details of spoils are marked-off on job documentation and supervisor is notified 3.4 All remaining documentation is completed according to reconciliation and security requirements
4. Complete job	4.1 Completed packages are packed into labelled trays and Australia Post labels are affixed according to job specifications 4.2 Faulty work is disposed of according to security requirements 4.3 Machine is cleared and stock put away according to security requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.5, 1.6,	Interprets text in documents or within systems to establish job requirements

	3.1, 4.1	Checks accuracy of information against written instructions
Writing	3.2-3.4	Completes workplace documentation as per job and enterprise requirements
Oral Communication	3.3	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	3.2	Uses simple mathematical calculations to calculate quantities
Navigate the world of work	1.7, 1.8, 3.2, 3.4, 4.3	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	3.3	Follows accepted practices and protocols for reporting issues to supervisors
Get the work done	1.1-1.6, 2.1-2.3, 3.1	- Follows clearly defined instructions and monitors own progress on tasks - Identifies and assembles resources required for tasks - Responds to predictable problems and implements standard or logical solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF208 Set up and operate a cheque mailer machine	ICPCF208C Set up and operate a cheque mailer machine	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF208 Set up and operate a cheque mailer machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely operate and monitor a cheque mailer machine for TWO jobs in accordance with job specifications and internal requirements (including documenting all faults, reconciling work, and completing all required documentation and reconciliations with minimum downtime)
- demonstrate all safety devices on the machine.

If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain setup procedures to meet work health and safety and enterprise requirements
- explain the quality check process
- identify waste disposal procedures relevant to this task, where they are kept and information included in these documents
- identify security requirements for completing reconciliation documentation.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to:

- cheque book
- mailer machine
- special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF209 Set up and operate in-line mail machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely set up and operate an intelligent in-line cut sheet form feeder, folder and inserter mail machine and perform production tasks involving off-loading, packing and labelling completed packages for distribution, and identifying any production problems.

It applies to individuals who work under direct supervision performing mainly routine tasks with some accountability for completing requirements in accordance with job specifications and internal procedures.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or process control system 1.2 Job is signed off by printers 1.3 Mailing procedures are identified from job specifications 1.4 Materials are checked and in correct order for job and all

ELEMENT	PERFORMANCE CRITERIA
	sheets are in correct position for barcode scanning if required 1.5 All tracks and conveyor belts are clean and clear 1.6 Work area is safe and ready for production, according to safety requirements
2. Set up job	2.1 Mail type is identified from job specifications 2.2 Number and type of inserts are identified 2.3 Job specifications are entered into console 2.4 Settings are checked against job specifications before production starts
3. Monitor operation	3.1 Machine is jogged to ensure correct positioning and hopper feed operation 3.2 All sections of the machine are monitored to ensure optimum operation 3.3 Envelopes are manipulated and fanned to ensure they move efficiently through the machine 3.4 Folds, inserts and envelopes are continuously monitored for defects, and defects are put aside for remake 3.5 Materials are checked and hoppers reloaded as required 3.6 Adjustments are made when quality standards are not met 3.7 Sequence is monitored according to job specifications 3.8 Number of spoils is documented according to enterprise procedures
4. Identify and rectify problems	4.1 Sequence or inserter errors are identified and barcodes checked, and changes entered into console, if required 4.2 Tracks, conveyors and sensors are cleaned and cleared if lags and jams occur 4.3 Any machine consumables needing replacement are replaced or adjusted with a minimum of downtime 4.4 Faulty performance of equipment is identified and reported according to enterprise procedures 4.5 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards
5. Pack envelopes	5.1 Completed envelopes are unloaded and checked for quality 5.2 Completed packages are packed into labelled trays and Australia Post labels are affixed according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	5.3 Sequence numbers and postcodes are in correct pre-sort order ensuring job continuity 5.4 Job is reconciled and documented and supervisor is notified if job does not reconcile 5.5 Machine is cleared and stock put away

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 2.1-2.4, 3.7, 3.8, 4.4, 5.2	- Establishes job requirements from information contained in relevant systems and documents - Checks accuracy of information against written instructions
Writing	1.2, 3.8, 4.4, 5.4	Records information related to outcomes of job according to organisational requirements
Oral Communication	4.4, 5.4	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	3.8, 5.3	Uses simple mathematical calculations and arranges sequential numerical information
Navigate the world of work	1.3, 1.5, 1.6, 3.6, 3.8, 4.4, 4.5, 5.1	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	4.4, 5.4	Follows accepted practices and protocols for reporting issues to supervisors
Get the work done	1.1-1.4, 2.2, 2.4, 3.1-3.6, 3.7, 4.1-4.5, 5.1, 5.3, 5.5	- Follows clearly defined instructions and monitors own progress on tasks - Identifies and responds to familiar problems related directly to own role by initiating standard procedures

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF209 Set up and operate in-line mail machine	ICPCF209C Set up and operate in-line mail machine	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF209 Set up and operate in-line mail machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely set up, operate and monitor an in-line mail machine
- demonstrate all safety devices on the machine
- complete job that includes multiple inserts and rectify any routine production problems that occur with minimum downtime.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain correct setup procedure to meet work health and safety (WHS) and enterprise requirements
- explain how quality checks are achieved
- identify waste disposal procedures relevant to this task, where they are kept and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to:

- in-line cut sheet form feeder
- folder and inserter
- special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF211 Set up and run machine for sewing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up and run a machine for sewn fastening.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are determined from job documentation or production control system 1.2 Availability of all job related components is checked
2. Set up sewing machine	2.1 Feeder is set up and adjusted according to job specifications 2.2 Different types of thread are set up according to job specifications, and thread tension is correct 2.3 Different types of needles are fitted according to job specifications 2.4 Correct sewing tape is attached to the machine according to job specifications 2.5 Hand rules are set according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	2.6 Timing of slitter is adjusted according to job specifications
3. Complete work	3.1 Sewing machine is operated safely according to enterprise procedures 3.2 Job is completed in required time 3.3 Samples are continuously monitored for defects, and defects are removed 3.4 Locations of all emergency shutdown buttons and triggers are known 3.5 All processed product is stacked and packed in bundles

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1-2.6	Recognises and interprets text to confirm work requirements from information contained within relevant specifications or systems
Navigate the world of work	3.1, 3.4	Recognises and follows organisational and legislative requirements, including safety requirements, associated with own role
Get the work done	1.1, 1.2, 2.1-2.6, 3.1-3.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Implements actions as per instructions, making slight adjustments if necessary - Identifies and assembles resources required to complete tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF211 Set up and run machine for sewing	ICPCF2101C Set up and run machine for sewing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF211 Set up and run machine for sewing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up and efficiently operate a machine to produce THREE different sewn products according to job specifications, listed performance criteria, and within production timeframes
- demonstrate all safety devices on the machine.

If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain work health and safety factors for setting up the machine
- establish effect of sewing in the wrong position
- identify largest/smallest size bag or sack that can be processed on the machine
- describe how to adapt the machines to facilitate smaller/larger stock.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to relevant facilities, materials and access to a machine for sewn fastening.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF214 Set up single-faced web

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up a single-faced web for corrugated board manufacture involving the reel in-feed, splicer, pre-conditioner, pre-heater, single facer, curing, coating and/or waxing sections of a corrugator.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for set up	1.1 Job specifications are read and interpreted from job documentation or process control system 1.2 Set-up is carried out correctly and in minimum time 1.3 Paper/board quantity requirements are estimated, ordered and checked
2. Set up reel transportation system	2.1 Unwind reel is set up and adjusted according to job specifications 2.2 Webbing procedures are carried out according to machinery requirements 2.3 Web control system is set up and adjusted according to job

ELEMENT	PERFORMANCE CRITERIA
	specifications 2.4 Reels are spliced/joined according to job specifications
3. Set up machine for single facing	3.1 Steam delivery system is set up and adjusted to suit corrugating process and according to job specifications 3.2 Corrugating rolls and pressure roll are set to correct pressure 3.3. Starch delivery system is set up and adjusted to suit corrugating process, and according to job specifications 3.4 Heat delivery system is set up and adjusted to suit corrugating process, and according to job specifications
4. Set up in-line units	4.1 Wax units are set up and adjusted to suit corrugating process, and according to job specifications 4.2 Coating units are set up and adjusted to suit corrugating process, and according to job specifications 4.3 Slitters are set up and adjusted according to job specifications 4.4 Cut-off knife is set up and adjusted according to job specifications
5. Inspect and adjust quality	5.1 Inspection and/or testing of sample is organised 5.2 Sample is visually inspected and/or tested according to enterprise procedures 5.3 Results are interpreted to determine adjustment requirements 5.4 Adjustment changes are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1-2.4, 3.1, 3.3, 3.4, 4.1-4.4, 5.4	Recognises and interprets text to confirm work requirements from information contained within relevant specifications or systems
Numeracy	1.3	Uses mathematical processes to estimate and check quantities

Navigate the world of work	5.2	Recognises and follows organisational procedures relevant to own role
Get the work done	1.1-1.3, 2.1-2.4, 3.1-3.4, 4.1-4.4, 5.1-5.5	- Sequences and schedules activities required for tasks and monitors implementation, making adjustments as necessary - Plans, identifies and assembles resources required to complete tasks - Uses analytical processes to interpret relevant information and make decisions directly related to tasks - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF214 Set up single-faced web	ICPCF2104C Set up single-faced web	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF214 Set up single-faced web

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up reel in-feed, splicer, pre-conditioner, pre-heater, single facer, curing, coating and/or waxing sections of a corrugator for at least TWO different product runs, according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain main requirements to run a corrugator and meet work health and safety and enterprise requirements
- identify FIVE different types/categories of rolled paperboard
- list end products commonly made from each rolled paperboard type
- identify principal components of a typical, single-face corrugated board adhesive and how to determine satisfactory performance of this adhesive
- list main tools and/or equipment items required for efficient handling of paperboard rolls in the corrugation in-feed section, and for each item explain:
 - how to determine if correct settings have been applied
 - the required checks
- explain what product factors are monitored automatically during production and how the monitoring function is achieved
- briefly explain the preparation required prior to setting up a sewing machine
- list the steps required to set roll pressures, adjust a steam delivery system and calibrate equipment

- identify the location and contents of relevant machine manuals, safety and other documentation.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to relevant facilities, materials, and in-line corrugating machinery.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF216 Set up double-faced web

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up a double-faced web for corrugated board manufacture involving the reel in-feed, splicer, bridge, pre-heater, double backer, curing, coating and/or waxing sections of a corrugator.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for set-up	1.1 Job specifications are read and interpreted from job documentation or process control system 1.2 Set-up is carried out correctly and in minimum time 1.3 Paper/board quantity requirements are estimated, ordered and checked
2. Set up reel transportation system	2.1 Unwind reel is set up and adjusted according to job specifications 2.2 Webbing procedures are carried out according to machinery requirements 2.3 Web control system is set up and adjusted according to job

ELEMENT	PERFORMANCE CRITERIA
	specifications 2.4 Reels are spliced/joined according to job specifications
3. Set up machine for double facing	3.1 Starch delivery system is set up and adjusted to suit corrugating process and according to job specifications 3.2 Rider roll is set to correct pressure 3.3 Heat delivery system is set up and adjusted to suit corrugating process and according to job specifications
4. Set up in-line units	4.1 Wax units are set up and adjusted to suit corrugating process and according to job specifications 4.2 Coating units are set up and adjusted to suit corrugating process and according to job specifications 4.3 Tape dispensing units are set up and adjusted to suit corrugating process and according to job specifications 4.4 Slitters are set up and adjusted according to job specifications 4.5 Cut-off knife is set up and adjusted according to job specifications
5. Inspect and adjust quality	5.1 Inspection and/or testing of sample is organised 5.2 Sample is visually inspected and/or tested according to enterprise procedures 5.3 Results are interpreted to determine adjustment requirements 5.4 Adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 2.3, 2.4, 3.1, 3.3, 4.1-4.5, 5.4	Recognises and interprets text to confirm work requirements from information contained within relevant specifications or systems
Numeracy	1.3	Uses mathematical processes to estimate and check quantities

Navigate the world of work	5.2	Recognises and follows organisational procedures relevant to own role
Get the work done	1.1-1.3, 2.1-2.4, 3.1-3.3, 4.1-4.5, 5.1-5.4	- Sequences and schedules activities required to complete tasks and monitors implementation making adjustments as necessary - Uses analytical processes to interpret relevant information and make decisions directly related to tasks - Plans, identifies and assembles resources required to complete tasks - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems
Reading	1.1, 2.1, 2.3, 2.4, 3.1, 3.3, 4.1-4.5, 5.4	Recognises and interprets text to confirm work requirements from information contained within relevant specifications or systems
Numeracy	1.3	Uses mathematical processes to estimate and check quantities
Navigate the world of work	5.2	Recognises and follows organisational procedures relevant to own role
Get the work done	1.1-1.3, 2.1-2.4, 3.1-3.3, 4.1-4.5, 5.1-5.4	- Sequences and schedules activities required to complete tasks and monitors implementation making adjustments as necessary - Uses analytical processes to interpret relevant information and make decisions directly related to tasks - Plans, identifies and assembles resources required to complete tasks - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF216 Set up double-faced web	ICPCF2106C Set up double-faced web	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF216 Set up double-faced web

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up the reel in-feed, splicer, bridge, pre-heater, double backer, curing, coating and/or waxing sections of a corrugator for at least TWO different product runs, according to manufacturer's and job specifications, enterprise procedures and listed performance criteria
- demonstrate all safety devices on the machine.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe significant risks posed to workers in this activity
- explain measures employed to prevent injury and/or illness in the case of the above identified risks
- identify FIVE different types/categories of rolled paperboard
- list end products commonly made from each rolled paperboard type
- identify principal components of a typical, double-backed corrugated board adhesive, and how to determine satisfactory performance of this adhesive
- list main tools and/or equipment items required for efficient handling of paperboard rolls in the corrugation in-feed section
- list the check required to ensure a sample conforms to required quality standards
- list preparation required prior to setting up the sewing machine
- list steps required to set roll pressures, adjust steam delivery system and calibrate equipment
- list steps required to determine if the correct settings have been applied
- list product factors that are monitored automatically during production

- ensure monitoring function is effective
- explain how to set up machine checks
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to in-line corrugated machinery, special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF218 Produce basic folded and glued cartons

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce basic folded and glued cartons and correctly shut down machinery when the job is completed.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain operation of carton blank system	1.1 Feeder is monitored and adjusted to ensure continuous and efficient feeding to machine 1.2 Carton blank pick-up and transport system is monitored and adjusted to ensure accurate and continuous carton blank handling and efficient operation 1.3 Transfer systems are monitored and adjusted to ensure correct and continuous carton blank handling and efficient operation 1.4 Delivery is monitored and adjusted to ensure quality and efficient product delivery
2. Maintain basic gluing and continuous folding	2.1 Registration and squareness of fold are monitored and adjusted to ensure quality of product meets approved sample standard

ELEMENT	PERFORMANCE CRITERIA
process	2.2 Registration of gluing is monitored and adjusted to ensure quality of product meets approved sample standard 2.3 Adhesion is monitored and adjusted to ensure quality meets approved sample standard
3. Maintain production process	3.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.2 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 3.3 Performance is monitored and verified using the process control system according to enterprise procedures 3.4 Production difficulties are anticipated and preventive action taken to prevent occurrence by timely intervention 3.5 Process adjustments to eliminate problems are reported according to enterprise procedures 3.6 Faulty performance of equipment is identified and reported according to enterprise procedures 3.7 Waste is sorted according to procedures
4. Identify and rectify minor problems	4.1 Problems in folding operation are identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to enterprise procedures 4.3 Folding is checked to ensure correct operation 4.4 Problems in gluing unit are identified and reported according to enterprise requirements 4.5 Adjustments or corrections are carried out according to enterprise procedures, and consistent with operator's skill level 4.6 Gluing unit operation is checked to ensure correct operation
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Glue system is washed ready for next run and liquid waste is disposed of according to regulatory requirements and enterprise procedures 5.4 Waste is removed from operating area and recycled or

ELEMENT	PERFORMANCE CRITERIA
	disposed of, where required, according to regulatory requirements and enterprise procedures 5.5 Machine faults requiring repair are identified and reported to designated person, according to enterprise procedures 5.6 Repair/adjustment is verified prior to resumption of operations 5.7 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	3.2, 5.1	Recognises and interprets text to confirm work requirements from information contained within relevant specifications and enterprise documents
Writing	3.5, 3.6, 4.1, 4.4, 5.5, 5.7	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.1, 3.5, 3.6, 4.1, 4.4, 5.2, 5.5	Participates effectively in spoken interactions to report issues or to confirm or clarify requirements
Navigate the world of work	2.1-2.3, 3.1-3.3, 3.5-3.7, 4.1, 4.2, 4.4, 4.5, 5.1-5.5, 5.7	Recognises and follows all procedures for operation and maintenance of equipment, incorporating regulatory and enterprise requirements
Interact with others	3.1, 3.5, 3.6, 4.1, 4.4, 5.2, 5.5	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.4, 2.1-2.3, 3.1-3.7, 4.1-4.6, 5.1-5.7	- Sequences and schedules activities required to complete tasks and monitors implementation making adjustments as necessary - Uses analytical processes to interpret relevant information and make decisions directly related to tasks - Recognises and anticipates an increasing range of familiar problems, actively looking for early warning

		- signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF218 Produce basic folded and glued cartons	ICPCF2108C Produce basic folded and glued cartons	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF218 Produce basic folded and glued cartons

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce at least FOUR simple straight line folded and glued cartons of different sizes and weights according to manufacturer's and job specifications and enterprise procedures on one of the following machines:
 - Royal 40
 - Bobst Media
 - Bobst Domino.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify the work health and safety factors for:
 - setting and/or operating machine delivery systems
 - using the folder/gluer machine
 - adjusting/correcting the machine
 - cleaning the machine
- identify areas of the sheet-fed feeder that need to be monitored to ensure trouble-free operation
- list checks to be undertaken when substrate is removed from the machine
- identify areas to continually observe to ensure smooth trouble-free operation of the machine
- list causes of out-of-square folding and how each can be corrected
- identify segments of quality assurance that are inspected at completion of the sample run, and changes required to production to ensure client requirements are met

- list part(s) of the machine that can be adjusted if carton blanks are creasing
- determine factors that cause poor glue adhesion on cartons, and requirements to adjust glue application
- list important tasks to correctly shut down the machine
- list tasks to prepare the finished work for dispatch
- identify areas of the machine that need regular cleaning, and materials that need to be cleaned from the machine
- identify requirements to keep the machine clear of surface rust (condensation)
- list factors that determine a quality product in a completed folded job
- identify machine manuals and safety documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials, as well as one of these machines:

- Royal 40
- Bobst Media
- Bobst Domino.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF220 Produce basic converted or finished product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to cover most converting and finishing operations including how to maintain substrate operations and complete relevant finishing processes.

It applies to individuals who prepare materials and set up and run a range of equipment and machinery for cutting, embossing, folding, collating and fastening. They work under direct supervision, however have certain responsibilities in the production process.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain operation of delivery system	1.1 Delivery systems are monitored and adjusted to ensure efficient and continuous operation of the process and ensure no damage to finished product 1.2 Substrate is added to and removed from the process according to job specifications
2. Maintain basic cutting	2.1 Cutting edge and knife or die condition is monitored and adjusted to ensure quality of product meets the approved sample

ELEMENT	PERFORMANCE CRITERIA
or embossing process	standard 2.2 Cutting/embossing pressures are monitored and adjusted to ensure quality of product meets the approved sample standard 2.3 Registration of cutting devices and knives or dies is monitored and adjusted to ensure quality of product meets the approved sample standard 2.4 Packing of cutting/embossing devices is monitored and adjusted to ensure quality of product meets the approved sample standard
3. Maintain folding process	3.1 Registration and squareness of fold are monitored and adjusted to ensure quality of product meets the approved sample standard, if relevant 3.2 Collating/inserting process is monitored and adjusted to ensure quality of product meets the approved sample standard, if relevant
4. Maintain basic fastening (adhesive/mechanical/thermal) process	4.1 Registration of fastening is monitored and adjusted to ensure quality of product meets the approved sample standard 4.2 Wire straightness, length, cut-off and clinching pressures or power current and dwell time are monitored and adjusted to ensure quality of product meets the approved sample standard
5. Maintain basic laminating process	5.1 Registration of laminating is monitored and adjusted to ensure quality of product meets the approved sample standard 5.2 Pressures are monitored and adjusted to ensure quality of product meets the approved sample standard 5.3 Adhesion is monitored and adjusted to ensure quality of product meets the approved sample standard 5.4 Basic in-line printing/coating processes are monitored and adjusted to ensure quality of product meets the approved sample standard
6. Maintain production process	6.1 Production process is operated in association with fellow workers, and according to enterprise procedures and planned daily schedule 6.2 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 6.3 Manual and/or automatic control is used according to job specifications 6.4 Performance is monitored and verified using the process

ELEMENT	PERFORMANCE CRITERIA
	control system according to enterprise procedures 6.5 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 6.6 Process adjustments to eliminate problems are reported according to enterprise procedures 6.7 Faulty performance of equipment is identified and reported according to enterprise procedures 6.8 Waste is sorted according to enterprise procedures
7. Identify and rectify problems or faults	7.1 Product and substrate are monitored and tested to ensure conformance to client requirements 7.2 Problems in converting/finishing machine operation are identified and reported according to enterprise procedures 7.3 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 7.4 Converting/finishing machine operation is checked to ensure correct operation
8. Conduct shutdown of production process	8.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 8.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 8.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 8.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 8.5 Repair/adjustment is verified prior to resumption of operations
9. Clean converting/finishing machine at end of run	9.1 Cutting units are disengaged and cleaned ready for next run 9.2 Cutting devices are sharpened according to WHS procedures 9.3 Machine bed is cleaned ready for next run 9.4 Cutting devices and knives are cleaned or replaced ready for next run 9.5 All units are disengaged and cleaned ready for next run 9.6 Adhesive or glue system is washed ready for next run, and liquid waste is disposed of according to regulatory requirements and enterprise procedures 9.7 Transportation and delivery systems are disengaged and

ELEMENT	PERFORMANCE CRITERIA
	cleaned ready for next run 9.8 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	6.2, 6.3, 8.1	Recognises and interprets texts to establish job requirements from information contained within relevant procedures and specifications
Writing	6.6, 6.7, 7.2, 8.4, 9.8	Enters routine data associated with production processes and enterprise procedures
Oral Communication	6.1, 6.6, 6.7, 7.2, 8.2, 8.4	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies to supervisors or discuss job requirements with colleagues
Navigate the world of work	2.1-2.4, 3.1, 3.2, 4.1, 4.2, 5.1-5.4, 6.1, 6.2, 6.4, 6.6-6.8, 7.2, 7.3, 8.1-8.4, 9.1-9.9	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	6.1, 6.6, 6.7, 7.2, 8.2, 8.4	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Follows accepted practices and protocols for reporting issues to supervisors
Get the work done	1.1, 1.2, 2.1-2.4, 3.1, 3.2, 4.1, 4.2, 5.1-5.4, 6.1, 6.4, 6.5, 6.8, 7.1, 7.3, 7.4, 8.3, 8.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring

		and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel OR - sheet
Monitoring and adjusting MUST include EITHER:	- reel stand and rewind - web control system - sheeting section OR - feeder and delivery system - sheet pick-up and transport system - transfer system

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF220 Produce basic converted or finished product	ICPCF220C Produce basic converted or finished product	Updated to meet Standards for Training Packages Changes to elements and performance criteria to clarify intent	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF220 Produce basic converted or finished product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly use any converting or finishing equipment (involving one process or a sequence of processes) to complete TWO different jobs involving different types, sizes and weights of substrate according to manufacturer's specifications, job specifications and enterprise procedures OR in the case of standalone minor flat-bed or rotary cutting processes THREE processes must be demonstrated
- correctly maintain substrate operation and complete relevant finishing process according to job specifications and within the production timeframe
- demonstrate all safety devices on the machine
- demonstrate use of computerised control, monitoring and data entry.

If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Work health and safety (WHS)

- identify WHS factors for:
 - setting up/adjusting the collating machine
 - setting up and/or operating machine transport and machine delivery systems
 - maintaining the cutting process
 - using the folding machine
 - using hot melt adhesive
 - maintaining laminating and in-line processes
 - keeping the machine clear of surface rust (condensation)
 - conducting machine shutdown procedures

- identify safety clothing for use when operating adhesive binders

Reel Delivery Systems Only

- list areas of the reel stand to be monitored to ensure trouble-free operation
- identify the area of the web control system to adjust to maintain correct web tension
- identify WHS factors for straightening the wire feed of a wire stitcher

Sheet Delivery Systems Only

- name THREE procedures to ensure smooth transport of sections through the machine
- list steps to ensure smooth delivery of sections
- list FOUR important factors to consider when setting the feeder
- explain the setting of the double/misfeed sheet calliper system
- name different types of sheet/section delivery systems
- list checks required when substrate is removed from the machine

Paper sizes and weights

- determine largest and smallest sheet or section size that can be run through this machine
- identify which areas of the machine should be adjusted to allow for 42gsm stock
- maintenance of cutting processes
- explain indicators of the need to replace a knife and how cutting pressure is adjusted
- list FOUR requirements to maintain the cutting process to ensure the machine can be kept running without interruption

Cutting machine faults and problems

- identify checks required when packing cutting devices
- explain the procedure for correcting THREE common machine faults
- list adjustments required if the cover is marked (scuffed) when trimming

Maintaining basic folding processes

- list THREE areas to continuously observe to ensure smooth, trouble-free operation of the machine
- list areas of the in-line process to monitor to assure quality of the product

Folding machine faults and minor problem-solving

- identify TWO causes of out-of-square folding and explain how each may be corrected
- list areas of the client's sample to be inspected to determine quality assurance
- explain communication to instigate if the:
 - job is out-of-square

- ink is too wet for production
- job does not coincide with the sample
- list parts of the machine to adjust if the sheet is creasing

Collating machine operation, problems and fault correction

- list factors that govern speed the machine operates at
- list indicators the machine needs lubrication
- identify how to prevent double sheet feeds
- identify circumstances indicating the machine needs adjustment
- list FOUR items to check against the client sample to constitute an acceptable collating result

Maintaining basic fastening (adhesive/mechanical/thermal) process

- list areas of the in-line process to monitor to ensure product quality
- name TWO sectors to observe to ensure the production process is trouble-free and continuous

Fastening operating problems and minor fault correction

- list circumstances when the machine needs to be adjusted
- explain how adhesive application is adjusted
- explain how wire can be straightened in the wire feed
- identify TWO possible reasons welding might be unsuccessful for a high-frequency welder
- determine quality aspects to consider in a completed:
 - adhesive-bound job
 - high-frequency welded job
 - wire-stitched job
- explain how production may need to be altered to meet client requirements

Maintaining laminating production processes and minor fault correction

- explain methods for assuring registration of laminating
- list areas of the in-line process to monitor to ensure a quality product
- identify TWO laminating problems that may occur during operation of the machine and adjustments or correction procedures required to ensure accurate operation
- determine quality aspects to consider in a completed laminated job, and ways production may need to be altered to meet client requirements

Machine shutdown procedures

- determine checks required when waste is removed from the machine and surrounding area for disposal or recycling
- list checks required during the machine shutdown procedure
- list checks required when cutting devices or knives are cleaned or replaced ready for the next run
- identify materials to be cleaned from the machine, and areas of the machine that require cleaning at the end of the run

Quality assurance

- list features to check on the finished product
- list THREE common faults that cause the finished product to be rejected, and how they can be fixed/avoided
- explain available testing procedures and why they are used
- list production records to be kept or written up, and the information that should be included

Information sources

- identify machine manuals, safety and other documentation relevant to this task, where are they kept and information included in them.
-

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to and use of relevant facilities, and equipment and materials used to produce a converted or finished product.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF221 Set up and produce basic guillotined product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to perform basic manual guillotining, including preparing machinery, inspecting results and rectifying production issues.

It applies to individuals who work under direct supervision, who are responsible for operating and monitoring equipment and machinery.

Note: Knife installation is part of ICPCBF321 Set up and produce complex guillotined product.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

1. Prepare job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job-related components is checked 1.4 Grip and lay edges of sheet are identified
2. Check knife sharpness	2.1 Knives are checked for appropriate sharpness 2.2 Dull knives are reported and arrangements made for them to be

	changed 2.3 Cutting sticks are replaced where necessary
3. Set up machine for basic guillotining	3.1 Guillotine is manually set up and adjusted according to job specifications 3.2 Clamping pressures are set up and adjusted according to job specifications
4. Conduct simple cut process	4.1 Material to be used for sample is organised correctly 4.2 Machine is set up and operated to produce a specified sample according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures
5. Organise sample inspection and/or testing	5.1 Sample is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 5.2 Results are interpreted to determine adjustment requirements 5.3 Adjustment changes are carried out according to product and machine specifications
6. Maintain basic guillotining process	6.1 Knife and cutting stick condition is monitored and adjusted to ensure product quality meets the approved sample standard 6.2 Cutting pressures are monitored and adjusted to ensure product quality meets the approved sample standard 6.3 Registration of knives is monitored and adjusted to ensure product quality meets the approved sample standard
7. Maintain production process	7.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 7.2 Production is maintained according to WHS requirements, manufacturer's specifications and enterprise procedures 7.3 Manual and/or automatic control is used according to job specifications 7.4 Performance is monitored and verified using the process control system according to enterprise procedures 7.5 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 7.6 Process adjustments to eliminate problems are reported according to enterprise procedures 7.7 Faulty performance of equipment is identified and reported according to enterprise procedures 7.8 Waste is sorted according to enterprise procedures

8. Identify and rectify problems and faults	8.1 Problems in guillotining machine operation are identified and reported according to enterprise procedures 8.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 8.3 Guillotining machine operation is checked to ensure correct operation
9. Conduct shutdown of production process	9.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 9.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 9.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 9.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 9.5 Repair/adjustment is verified prior to resumption of operations
10. Clean guillotining machine at end of run	10.1 Knives are replaced and cleaned ready for next run 10.2 Machine bed is cleaned ready for next run 10.3 Cutting units are disengaged and cleaned ready for next run 10.4 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1, 3.2, 4.2, 5.3, 7.1-7.3, 9.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	2.2, 7.6, 7.7, 8.1, 9.4, 10.4	Records information relating to production and machinery problems and completes production reports and other relevant documentation in required format
Oral Communication	2.2, 7.1, 7.6, 7.7, 8.1, 9.2, 9.4	Uses appropriate language to adequately report discrepancies and listens for relevant information to confirm operations can resume

Navigate the World of work	1.1, 3.1, 3.2, 4.2, 5.1, 5.3, 6.1-6.3, 7.1-7.4, 7.6-7.8, 8.1, 8.2, 9.1-9.4, 10.1-10.4	- Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures - Takes personal responsibility for adherence to regulatory responsibilities relevant to own work context
Interact with others	2.2, 7.1, 7.6, 7.7, 8.1, 9.2, 9.4	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Follows accepted practices and protocols for reporting issues to supervisors
Get the work done	1.2-1.4, 2.1-2.3, 4.1, 5.1-5.3, 6.1-6.3, 7.1, 7.2, 7.4-7.8, 8.1-8.3, 9.1-9.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks, and identifies and assembles required resources - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF221 Set up and produce basic guillotined product	ICPCF221C Set up and produce basic guillotined product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF221 Set up and produce basic guillotined product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate all safety devices on the machine
- correctly set up (not including knife change) and produce TWO basic guillotined products (if possible, one large sheet and one small sheet) according to manufacturer's and job specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify health and safety factors for:
 - setting up and operating the machine
 - checking and adjusting the machine
 - maintaining the production process
 - handling knife blades during the knife change operation
 - shutting down or cleaning the machine
- identify information concerning cutting that should be found in the job documentation or production control system
- identify factors that:
 - indicate a new blade is needed
 - indicate the need to replace a cutting stick
 - should be considered when setting up a guillotine for cutting
 - indicate the need for machine lubrication
- identify the difference between a sharp knife from a dull knife, and problems arising from continuously using a dull blade

- explain how correct clamping pressure is determined for a given job
- identify reporting procedures for when the machine malfunctions
- explain treatment/disposal of guillotine waste
- identify the part of the guillotine that should be checked if, after a cut:
 - top sheets are out-of-square
 - top sheets are creasing across the cut line
- identify where information is found regarding correct types and methods of lubrication
- list special operations that are essential when shutting down the machine
- identify quality aspects to consider in a completed cutting job and when checking against the sample
- list steps to take if the cutting result does not coincide with the sample
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to and use of facilities, equipment and materials used to set up and produce a basic guillotined product.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF222 Set up and operate in-line cutter

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely set up and operate an in-line cutter set for high run jobs, including determining the quality of output and correctly packing completed product.

It applies to individuals working under direct supervision, performing tasks related to operating machinery and completing production requirements according to job specifications and internal procedures.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or process control system 1.2 Job is signed off from previous process and ready for mailing procedures 1.3 Materials are checked and in correct order for the job 1.4 Work area is safe and ready for production according to safety

ELEMENT	PERFORMANCE CRITERIA
	requirements
2. Set up job	2.1 Job specifications are entered into console according to enterprise requirements 2.2 Guides and guards and cut depth are correctly set and positioned according to job specifications 2.3 Settings are checked against job specifications before production is commenced 2.4 Settings are tested with a product sample, and adjustments are made if necessary
3. Operate in-line cutter	3.1 Product is loaded in correct position according to job specifications 3.2 Quality check is carried out and defective product is removed according to enterprise procedures 3.3 Adjustments are made when quality standards are not met 3.4 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards
4. Pack cut product	4.1 Completed product is unloaded and checked for quality 4.2 Completed product is packed into labelled trays ensuring job/order continuity for transfer to the next process 4.3 Documentation relating to the product is completed correctly 4.4 Machine is cleared and stock put away

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.2, 2.3, 3.1, 4.2	Evaluates textual information and establishes job and component requirements from information contained within relevant systems
Writing	2.1, 4.3	Uses appropriate and clear language to complete workplace documentation
Navigate the	1.2, 1.4, 3.2-3.4, 4.1	Complies with legislative requirements and follows

world of work		organisational policies and procedures relevant to own role
Get the work done	1.3, 2.4, 3.2, 3.3, 4.2-4.4	- Follows clearly defined instructions and sequencing, and monitors own progress on the task - Responds to predictable problems and implements standard or logical solutions related to own role in immediate work environment - Follows routine procedures for using digital technology by reading data from electronic monitoring and control system

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF222 Set up and operate in-line cutter	ICPCF222C Set up and operate in-line cutter	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF222 Set up and operate in-line cutter

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely operate and set up an in-line cutter to complete TWO jobs to meet job specifications, including quality monitoring during the process and when packing the product.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain set-up procedures to meet work health and safety and enterprise requirements
- explain the quality check process
- identify and explain waste disposal procedures relevant to this task.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to an in-line cutter and other special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF223 Set up machine for cutting (trimming)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up 3- or 5-knife trimmers or spine trimmers, and may involve gathering (collating) and fastening.

It applies to individuals who work under direct supervision with some accountability for the quality of outcomes.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Install and replace cutting knives into machine	2.1 Appropriate knives are selected and secured to the machine 2.2 Dull blades are securely bolted into protective holder

ELEMENT	PERFORMANCE CRITERIA
3. Set up section transportation system	3.1 Feeder is set up and adjusted according to job specifications 3.2 Section pick-up and transportation system is set up and adjusted according to job specifications 3.3 Transfer systems are set up and adjusted according to job specifications
4. Set up stacking system	4.1 Delivery is set up and adjusted according to job specifications 4.2 Section transfer and control system is set up and adjusted according to job specifications
5. Set up machine for trimming	5.1 Trimmer knives are set up and adjusted according to job specifications 5.2 Clamping pressures are set up and adjusted according to job specifications 5.3 Stops and lays are set to remove desired trim
6. Conduct sample run	6.1 Material to be used for sample is organised correctly 6.2 Machine is set up and operated to produce a specified sample according to work health and safety requirements, manufacturer's specifications and enterprise procedures 6.3 Sample is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 6.4 Results are interpreted to determine adjustment requirements 6.5 Adjustment changes are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1-3.3, 4.1, 4.2, 5.1, 5.2, 6.2, 6.3, 6.5	Recognises and evaluates text to establish job requirements from information contained within relevant systems
Navigate the world of	2.1, 2.2, 6.2, 6.3	Complies with legislative requirements and follows organisational policies and procedures relevant to own

work		role
Get the work done	1.2, 1.3, 2.1, 3.1-3.3, 4.1, 4.2, 5.1-5.3, 6.1, 6.2, 6.4, 6.5	- Follows clearly defined instructions and sequencing, and monitors own progress on the task - Responds to predictable problems and implements standard or logical solutions
Reading	1.1, 3.1-3.3, 4.1, 4.2, 5.1, 5.2, 6.2, 6.3, 6.5	Recognises and evaluates text to establish job requirements from information contained within relevant systems
Navigate the world of work	2.1, 2.2, 6.2, 6.3	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Get the work done	1.2, 1.3, 2.1, 3.1-3.3, 4.1, 4.2, 5.1-5.3, 6.1, 6.2, 6.4, 6.5	- Follows clearly defined instructions and sequencing, and monitors own progress on the task - Responds to predictable problems and implements standard or logical solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF223 Set up machine for cutting (trimming)	ICPCF223C Set up machine for cutting (trimming)	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF223 Set up machine for cutting (trimming)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up trimming machines according to job specifications and within the production timeframe on TWO occasions using different grammage or thickness of sections or books, and different size alterations (e.g. A4 to A5)
- demonstrate all safety devices on one of these machines:
 - book block trimmer or single section copy trimmer (3-knife section gather/stitch/trim)
OR
 - single section copy trimmer (1- or 3-knife multiple flat sheet gather/fold/stitch/trim)
OR
 - 5-knife trimmer.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain information found on a job ticket or production control system
- identify work health and safety factors that must be considered when:
 - handling knife blades during the knife change operation
 - setting up transportation systems
 - setting up three-knife stacking systems
 - setting up the trimming unit
- explain how trimmer knives should be transported to and from the machine and the safety devices to use when replacing trimmer knives

- identify danger areas at the delivery end of the book trimming machine and machinery safeguards for setting up the trimmer
- list factors that indicate:
 - a new blade is needed
 - a cutting stick needs to be replaced
 - knives need to be replaced
- explain important elements to consider when moving knives to suit a different size book and when moving knives to suit maximum/minimum size
- list recommended knife angles for the trimming machine
- describe what can occur if a dull blade is used continuously
- explain differences between a sharp knife and a dull knife
- explain when belt timing readjustment is required
- identify what determines book transport speed, and adjustments required to ensure book is fast against book stops
- explain adjustments required when the book is:
 - out-of-square
 - scratched or scuffed
- explain how the batching device is activated
- identify problems expected in the delivery area of the machine
- explain how clamp pressure for each job is determined and the evidence that indicates clamp pressure is insufficient
- determine machine adjustments required to remove:
 - more offcut from the fore edge of the book
 - more offcut from the head and tail of the book
- explain how to correct these:
 - book out-of-square
 - book scuffing
 - wrong sections
 - incorrect cover creasing
 - wrong wire stitch positions
 - wrong sheet/section sequence
 - wet ink problems
 - book spines bursting
 - waste not transferring from cut line
- identify areas to check on the final job sample
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF224 Produce cut (trimmed) product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce a knife-trimmed product using a single or multiple knife trimmer or spine trimmer while maintaining the production process, monitoring machinery for faults and problems, and rectifying minor problems according to enterprise procedures.

It applies to individuals performing a range of routine tasks, who utilise a variety of skills to ensure production of products in line with quality standards.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain operation of transportation system	1.1 Feeder is monitored and adjusted to ensure continuous and efficient feeding to the machine 1.2 Section pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet/section/book handling and efficient operation 1.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation

ELEMENT	PERFORMANCE CRITERIA
	1.4 Substrate is added to the process according to job specifications
2. Maintain section delivery system	2.1 Delivery is monitored and adjusted to ensure quality and efficient product delivery
3. Maintain cutting (trimming) process	3.1 Knife condition is monitored and adjusted to ensure product quality meets the approved sample standard 3.2 Cutting pressures are monitored and adjusted to ensure product quality meets the approved sample standard 3.3 Registration of knife(s) is monitored and adjusted to ensure product quality meets the approved sample standard
4. Maintain production process	4.1 In-line printing/converting/binding/finishing processes are monitored and adjusted to ensure product quality meets the approved sample standard 4.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 4.3 Production is maintained according to work health and safety requirements, manufacturer's specifications and enterprise procedures 4.4 Manual and/or automatic control is used according to job specifications 4.5 Performance is monitored and verified using the process control system according to enterprise procedures 4.6 Process adjustments to eliminate problems are reported according to enterprise procedures. 4.7 Faulty performance of equipment is identified and reported according to enterprise procedures 4.8 Waste is sorted according to enterprise procedures
5. Identify and rectify problems and faults	5.1 Problems in cutting (trimming) machine operation are identified and reported according to enterprise procedures 5.2 Adjustments or corrections are carried out according to specified procedures 5.3 Cutting (trimming) machine operation is checked to ensure correct operation 5.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
	5.5 Repair/adjustment is verified prior to resumption of operations
6. Conduct shutdown of production process	6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 6.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 6.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
7. Clean machine	7.1 Knife/knives, cutting sticks and machine bed are cleaned ready for next run 7.2 Cutting machine is disengaged and cleaned ready for next run 7.3 In-line printing/converting/binding/finishing units are cleaned ready for next run 7.4 Section feed, transport and delivery systems are disengaged and cleaned ready for next run 7.5 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.4, 4.3, 4.4, 6.1	Recognises and interprets texts to establish job requirements from information contained within relevant procedures and specifications
Writing	4.6-4.8, 5.1, 5.4, 7.5	Produces familiar text types using simple vocabulary, grammatical structures and conventions
Oral Communication	4.2, 4.6, 4.7, 5.1, 5.4, 6.2	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies to supervisors or discuss job requirements with colleagues
Navigate the world of work	1.1-1.3, 2.1, 3.1-3.3, 4.1-4.8, 5.1-5.4, 6.1-6.3, 7.1-7.5	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory

		requirements and enterprise procedures
Interact with others	4.2, 4.7, 4.8, 5.1, 5.4, 6.2	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Follows accepted practices and protocols for reporting issues to supervisors
Get the work done	1.1-1.4, 2.1, 3.1-3.3, 4.4-4.7, 5.2, 5.4, 5.5, 6.1, 6.3	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF224 Produce cut (trimmed) product	ICPCF224C Produce cut (trimmed) product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF224 Produce cut (trimmed) product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use a three-knife trimming unit to accurately complete THREE jobs of various types, sizes and thicknesses of substrate according to manufacturer's and job specifications and enterprise procedures within required production schedule timeframes
- demonstrate all safety devices on the machine
- demonstrate use of computerised control, monitoring and data entry systems

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety factors to consider:
 - for the transport and delivery areas of the machine
 - while the trimming process is operational
 - while conducting machine shutdown, maintenance and cleaning
- name procedures to ensure smooth transport of sections through the machine
- list steps to ensure smooth delivery of the sections
- identify how waste (offcut) should be removed from the work area
- describe procedures to ensure the machine is kept running without interruption
- describe what needs to be adjusted if the cover is marked (scuffed)
- identify basic in-line processes associated with the machine
- list checks to be made during the machine shutdown procedure
- identify areas of the machine that require cleaning at the end of the run
- identify quality aspects to consider in a completed cutting job

- list what needs to be checked when waste is removed from the machine and surrounding area for disposal or recycling
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to a three-knife trimming unit and use of, special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF225 Set up machine for basic flat-bed die cutting or embossing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up a machine for basic flat-bed die cutting or embossing.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Prepare cutting or embossing devices	2.1 Appropriate cutting devices or dies are selected and secured to machine 2.2 Cutting devices or dies are registered and proofed 2.3 Cutting devices or dies are correctly mounted

ELEMENT	PERFORMANCE CRITERIA
3. Set up delivery system	3.1 Delivery systems are set up and adjusted 3.2 Substrate is added to and removed from the process according to job specifications
4. Set up machine	4.1 Flat-bed cutting or embossing devices are set up and adjusted 4.2 Cutting/embossing pressures are set up and adjusted 4.3 Machine lays are set to correct position for registration
5. Set up in-line units for basic processes	5.1 Minor in-line printing/converting/binding units are set up for basic processes and adjusted according to machine requirements and job specifications 5.2 Assistance is given in set up of major in-line printing/converting/binding units
6. Conduct sample run	6.1 Material to be used for sample is organised correctly 6.2 Machine is set up and operated to produce a specified sample according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 6.3 Sample is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 6.4 Results are interpreted to determine adjustment requirements 6.5 Adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 4.2, 5.1, 6.2, 6.5	Recognises and evaluates texts to establish job requirements from information contained within relevant systems
Oral Communication	5.2	Participates effectively in spoken interactions to confirm or clarify understanding
Navigate the	6.2, 6.3	Complies with legislative requirements and follows organisational policies and procedures relevant to own

world of work		role
Interact with others	5.2	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1-1.3, 2.1-2.3, 3.1, 3.2, 4.1-4.3, 5.1, 5.2, 6.1-6.5	- Determines priorities and sequences steps involved in clearly defined tasks - Implements actions as per instructions, making slight adjustments if necessary - Plans, identifies and assembles resources required to complete tasks - Follows routine instructions for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel OR - sheet.
Setting up and adjusting MUST include EITHER:	- unwind reel - webbing procedures - web control system - folder and sheeter OR - feeder and delivery system - sheet pick-up system - transfer system - sheet transfer and control.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF225 Set up machine for basic flat-bed die cutting or embossing	ICPCF225C Set up machine for basic flat-bed die cutting or embossing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF225 Set up machine for basic flat-bed die cutting or embossing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up a machine for basic flat-bed die cutting or embossing for TWO jobs, changing the type and size of substrates and design of finished patterns according to job specifications and within the production timeframe
- demonstrate all safety devices on the machine.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety factors for:
 - setting up and/or operating machine delivery systems
 - setting up cutting devices
- list the information, required when setting up transportation systems, concerning die cutting or embossing that is found in the job documentation or production control system
- identify checks needed for:
 - mounting cutting devices on a flat-bed
 - registering and proofing cutting devices
 - securing cutting devices to the machine
 - setting up, adjusting and operating flat-bed cutting devices
- determine the selection criteria of particular cutting devices
- identify important areas to consider/check:
 - during feeder unit set up
 - to ensure suitability of in-line processes

- list steps to ensure the delivery system operates effectively
- determine machine pressure, machine cutting depths and adjustments needed to in-line units
- identify details of the completed sample to examine to ensure conformance with client requirements
- explain product testing procedures available and how often they should be used
- common faults that can occur with the flat-bed cutting process
- determine factors that indicate a need to replace knives/blades/cutting edges
- explain cutting edges storing to guard against damage and deterioration
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them

Reel Systems Only

- identify checks needed:
 - during webbing procedures
 - of the reel delivery system that may need adjustment according to job specifications, and to be observed to prevent damage to the finished product
 - for adjustments to the unwind reel that may be needed to suit various jobs

Sheet Systems Only

- facilitate accurate sheet pick-up and transportation
- identify ways folded sheets can be secured for dispatch.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to flat-bed die cutting or embossing machine and special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF226 Produce basic flat-bed die cut or embossed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce either a flat-bed die cut or embossed product, and clean down the equipment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1.Maintain operation of delivery systems	1.1 Delivery systems are monitored and adjusted to ensure efficient continuous operation to ensure no damage to finished product 1.2 Substrate is added to and removed from the process according to job specifications
2. Maintain basic flat-bed cutting process	2.1 Cutting edge and knife condition are monitored and adjusted to ensure product quality meets the approved sample standard 2.2 Cutting pressures are monitored and adjusted to ensure product quality meets the approved sample standard 2.3 Registration of cutting devices and knife(s) is monitored and adjusted to ensure product quality meets the approved sample

ELEMENT	PERFORMANCE CRITERIA
	standard 2.4 Packing of cutting devices is monitored and adjusted to ensure product quality meets the approved sample standard 2.5 Basic in-line printing/converting/binding/finishing process(es) are monitored and adjusted to ensure product quality meets the approved sample standard
3. Maintain production process	3.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.2 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 3.3 Manual and/or automatic control is used according to job specifications 3.4 Performance is monitored and verified using the process control system according to enterprise procedures 3.5 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.6 Process adjustments to eliminate problems are reported according to enterprise procedures 3.7 Faulty performance of equipment is identified and reported according to enterprise procedures 3.8 Waste is sorted according to enterprise procedures
4. Identify and rectify problems	4.1 Problems in cutting (flat-bed) machine operation are identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 4.3 Cutting (flat-bed) machine operation is checked to ensure correct operation
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.4 Machine faults requiring repair are identified and reported to

ELEMENT	PERFORMANCE CRITERIA
	designated person according to enterprise procedures 5.5 Repair/adjustment is verified prior to resumption of operations
6. Clean flat-bed cutting machine at end of run	6.1 Cutting devices and knife(s) are cleaned or replaced ready for next run 6.2 Cutting devices are sharpened 6.3 Machine bed is cleaned ready for next run 6.4 Cutting units are disengaged and cleaned ready for next run 6.5. In-line printing/converting/binding/finishing units are cleaned ready for next run 6.6 Transportation and delivery systems are disengaged and cleaned ready for next run 6.7 Production records or other documentation are accurately completed, where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	3.2, 3.3, 5.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.6, 3.7, 4.1, 5.4, 6.8	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.1, 3.6, 3.7, 4.1, 5.2, 5.4	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies to supervisors or discuss job requirements with colleagues
Navigate the World of work	2.1-2.5, 3.6-3.8, 4.1, 4.2, 5.1-5.4, 6.1-6.8	Complies with legislative requirements and follows organisational policies and procedures relevant to own role, particularly with regard to safe operation of machinery and equipment
Interact with others	3.1, 3.6, 3.7, 4.1, 5.2, 5.4	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Follows accepted practices and protocols for reporting

		issues to supervisors
Get the work done	2.1-2.5, 3.1-3.5, 3.7-3.8, 4.1, 4.2, 5.3-5.5	• Determines priorities and sequences steps involved in clearly defined, familiar tasks • Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans • Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• reel OR • sheet.
Monitoring and adjusting MUST include EITHER:	• reel stand and rewind reel to maintain correct tension • web control system to ensure correct tension • sheeting section OR • feeder and delivery systems • sheet pick-up and transportation systems to ensure accurate and efficient sheet handling • transfer system.

New Topic (127)

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF226 Produce basic flat-bed die cut or embossed product	ICPCF226C Produce basic flat-bed die cut or embossed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF226 Produce basic flat-bed die cut or embossed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate all safety devices on the required machine.
- correctly produce either a flat-bed die cut or embossed product for TWO jobs with different types and sizes of substrate and design of finished patterns according to manufacturer's and job specifications, enterprise procedures and unit requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety factors for:
 - setting up and/or operating machine transport systems
 - setting up and/or operating machine delivery systems
 - maintaining the cutting process
 - conducting machine shutdown procedures
- identify areas of the machine to monitor to ensure trouble-free operation
- list checks required when:
 - substrate is removed from the machine
 - cutting devices or knives are cleaned or replaced ready for the next run
 - packing cutting devices
 - waste is removed from the machine and surrounding area for disposal or recycling
 - during the machine shutdown process
- determine indicators that demand knife replacement
- explain pressure adjustment
- identify the procedure for correcting common machine faults

- identify areas of the machine that require cleaning at the end of the run
- identify production records to be kept or written up
- identify machine manuals, safety and other documentation relevant to this task and where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials required to produce a basic flat-bed die cut or embossed product.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF227 Set up machine for basic rotary die cutting or embossing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up a machine for basic rotary die cutting or embossing.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Mount rotary cutting or embossing devices	2.1 Appropriate cutting devices or dies are selected and secured to machine according to job specifications 2.2 Cutting devices or dies are registered and proofed 2.3 Cutting devices or dies are correctly mounted

ELEMENT	PERFORMANCE CRITERIA
3. Set up reel system	3.1 Unwind and rewind reels are set up and adjusted according to job specifications 3.2 Webbing procedures are carried out according to job specifications 3.3 Web control system is set up and adjusted according to job specifications 3.4 Reels are spliced/joined according to job specifications 3.5 Folder and sheeter are set up and adjusted according to job specifications
4. Set up sheet system	4.1 Feeder and delivery systems are set up and adjusted according to job specifications 4.2 Sheet pick-up and transportation system is set up and adjusted according to job specifications 4.3 Transfer systems are set up and adjusted according to job specifications 4.4 Substrate is removed from process according to job specifications
5. Set up machine for basic rotary cutting	5.1 Rotary cutting devices are set up and adjusted according to job specifications 5.2 Cutting pressures are set up and adjusted according to job specifications 5.3 Counter knives/anvils are set in correct position
6. Set up in-line units for basic processes	6.1 Minor in-line printing/converting/binding units are set up for basic processes and adjusted according to machine requirements and job specifications 6.2 Assistance is given in set-up of major in-line printing/converting/binding units
7. Conduct sample run	7.1 Material to be used for sample is organised correctly 7.2 Machine is set up and operated to produce a specified sample according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 7.3 Sample is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 7.4 Results are interpreted to determine adjustment requirements 7.5 Adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 3.1-3.5, 4.1-4.4, 5.1, 5.2, 6.1, 7.2, 7.5	Recognises and interprets texts to establish job requirements
Oral Communication	6.2	Participates effectively in spoken interactions to confirm or clarify understanding
Navigate the world of work	7.2, 7.3	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	6.2	Cooperates with others as part of familiar, routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1-1.3, 2.1-2.3, 3.1-3.5, 4.1-4.4, 5.1-5.3, 6.1, 6.2, 7.1-7.5	- Determines priorities and sequences steps involved in clearly defined tasks - Implements actions as per instructions, making slight adjustments if necessary - Plans, identifies and assembles resources required to complete tasks - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF227 Set up machine for basic rotary die cutting or embossing	ICPCF227C Set up machine for basic rotary die cutting or embossing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF227 Set up machine for basic rotary die cutting or embossing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up machines for basic rotary die cutting or embossing for up TWO jobs, changing the type and size of substrates and design of finished patterns according to manufacturer's and job specifications, enterprise procedures and the unit requirements
- demonstrate all safety devices on the machine.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety (WHS) factors for:
 - setting up cutting devices
 - setting up and/or operating machine delivery systems
 - setting up sheet transportation systems
 - setting up reel transportation systems
- identify the checks needed when:
 - cutting devices are mounted on a cylinder
 - cutting devices are attached to the machine
 - substrate is removed from the machine
- explain information concerning rotary die cutting or embossing found in the job documentation or production control system
- determine adjustments to the unwind reel that may be needed to suit various jobs
- identify important areas to be considered during webbing procedures
- identify important areas to check when the feeder unit is set up

- identify important areas of the reel delivery system that may need to be adjusted according to job specifications
- list steps to ensure the delivery system operates effectively
- determine ways the finished product can be secured for dispatch
- identify ways to determine machine pressure
- identify ways to determine machine cutting depths
- identify the need to adjust in-line units
- list details of the completed sample to be examined to ensure conformance with client requirements
- explain storing the cutting edges and counter knives (anvils) to guard against damage and deterioration
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to basic rotary die cutting or embossing machinery and special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF228 Produce basic rotary die cut or embossed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce either a flat-bed die cut or embossed product and clean down the equipment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain transportation system	1.1 Delivery systems are monitored and adjusted to ensure accurate and continuous operation and eliminate damage to finished product 1.2 Substrate is added to and removed from the process according to job specifications
2. Maintain basic rotary die cutting or embossing process	2.1 Cutting edge and knife condition are monitored and adjusted to ensure product quality meets the approved sample standard 2.2 Cutting pressures are monitored and adjusted to ensure product quality meets the approved sample standard 2.3 Registration of cutting devices and knife(s) is monitored and adjusted to ensure product quality meets the approved sample

ELEMENT	PERFORMANCE CRITERIA
	standard 2.4 Packing of cutting devices is monitored and adjusted to ensure product quality meets the approved sample standard
3. Maintain production process	3.1 Basic in-line printing/converting/binding/finishing process(es) are monitored and adjusted to ensure product quality meets the approved sample standard 3.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.3 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 3.4 Manual and/or automatic control is used according to job specifications 3.5 Performance is monitored and verified using the process control system according to enterprise procedures 3.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.7 Process adjustments to eliminate problems are reported according to enterprise procedures 3.8 Faulty performance of equipment is identified and reported according to enterprise procedures 3.9 Waste is sorted according to enterprise procedures
4. Identify and rectify problems and faults	4.1 Problems in cutting (rotary) machine are identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 4.3 Cutting (rotary) machine operation is checked to ensure correct operation 4.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 4.5 Repair/adjustment is verified prior to resumption of operations
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Substrate waste is removed from operating area and recycled

ELEMENT	PERFORMANCE CRITERIA
	or disposed of, where required, according to regulatory requirements and enterprise procedures
6. Clean rotary cutting machine at end of run	6.1 Cutting devices and knife/knives are cleaned or replaced ready for next run 6.2 Cutting devices are sharpened correctly 6.3 Machine bed is cleaned ready for next run 6.4 Cutting units are disengaged and cleaned ready for next run 6.5 In-line printing/converting/binding/finishing units are cleaned ready for next run 6.6 Transport and delivery systems are disengaged and cleaned ready for next run 6.7 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	3.3, 3.4, 5.1	Recognises and interprets texts to establish job requirements from information contained within relevant procedures and specifications
Writing	5.7, 5.8, 4.1, 4.4, 6.8	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.2, 3.7, 3.8, 4.1, 4.4, 5.2	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies to supervisors or discuss job requirements with colleagues
Navigate the world of work	2.1-2.4, 3.1-3.3, 3.5, 3.7-3.9, 4.1-4.4, 5.1-5.3, 6.1-6.8	Complies with legislative requirements and follows organisational policies and procedures relevant to own role, particularly with regard to safe operation of machinery and equipment
Interact with others	3.2, 3.7, 3.8, 4.1, 4.4, 5.2	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Follows accepted practices and protocols for reporting issues to supervisors

Get the work done	1.1, 1.2, 2.1-2.4, 3.2-3.6, 3.9, 4.1-4.3, 4.5, 5.1, 5.3	• Determines priorities and sequences steps involved in clearly defined, familiar tasks • Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans • Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• reel OR • sheet
Monitoring and adjusting MUST include EITHER:	• reel stand and rewind reel • web control system • sheeting section OR • feeder and delivery system • sheet pick-up system • transfer system

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF228 Produce basic rotary die cut or embossed product	ICPCF228C Produce basic rotary die cut or embossed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF228 Produce basic rotary die cut or embossed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce basic products using either rotary die cutting or embossing on TWO jobs, with different types and sizes of substrate and design of finished patterns according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain work health and safety factors for:
 - setting up and/or operating machine transport systems
 - setting up and/or operating machine delivery systems
 - maintaining the cutting process
 - conducting machine shutdown procedures
- identify areas of the delivery system to monitor to ensure trouble-free operation
- explain checks needed when:
 - substrate is removed from the machine
 - waste is removed from the machine and surrounding area for disposal or recycling
 - cutting devices or knives are cleaned, stored or replaced ready for the next run
- determine important areas to monitor when maintaining the rotary cutting process
- list sectors of the basic in-line printing/converting/binding/finishing process that may need to be monitored and adjusted to meet approved standards
- identify production difficulties that can be expected during production runs
- explain the procedure for correcting common machine faults

- identify areas of the machine that require cleaning at the end of the run
- list quality aspects to consider in a completed rotary cutting job
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to basic rotary die cutting or embossing machinery and special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF231 Set up machine for basic flat-bed cutting

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up minor flat-bed cutting processes, including kiss cutting, hole punching, hole drilling, slotting, slitting, sheeting, creasing, scoring, and pin perforating, indexing and round cornering.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Mount flat-bed cutting devices	2.1 Cutting devices are correctly mounted 2.2 Cutting devices are registered and proofed 2.3 Appropriate cutting devices are selected and secured to machine according to job specifications

ELEMENT	PERFORMANCE CRITERIA
3. Set up delivery systems	3.1 Delivery systems are set up and adjusted according to job specifications 3.2 Substrate is added to and removed from process according to job specifications
4. Set up machine	4.1 Flat-bed cutting devices are set up and adjusted according to job specifications 4.2 Cutting pressures are set up and adjusted according to job specifications 4.3 Machine lays are set to correct position for registration
5. Assist in set-up for other in-line processes	5.1 Assistance is given in set-up of in-line printing/converting/binding units. 5.2 Minor in-line printing processes (date stamping, numbering) are set up correctly
6. Conduct sample run	6.1 Material to be used for sample is organised correctly 6.2 Machine is set up and operated to produce a specified sample according to work health and safety requirements, manufacturer's specifications and enterprise procedures 6.3 Sample is visually inspected and/or tested, or laboratory testing is organised, according to enterprise procedures 6.4 Results are interpreted to determine adjustment requirements 6.5 Adjustment changes are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.2, 4.1, 4.2, 6.2, 6.5	Recognises and interprets texts to establish job requirements
Oral Communication	5.1	Participates effectively in spoken interactions to confirm or clarify understanding

Navigate the world of work	6.2, 6.3	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	5.1	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1-1.3, 2.1-2.3, 4.1-4.3, 5.1, 5.2, 6.1-6.5	- Determines priorities and sequences steps involved in clearly defined tasks - Implements actions as per instructions, making slight adjustments if necessary - Plans, identifies and assembles resources required to complete tasks - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel OR - sheet.
Setting up and adjusting MUST include EITHER:	- unwind and rewind reels - web control - folder and sheeter OR - feeder and delivery - sheet pick-up and transportation - transfer.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF231 Set up machine for basic flat-bed cutting	ICPCF231C Set up machine for basic flat-bed cutting	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF231 Set up machine for basic flat-bed cutting

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate all safety devices on the machinery
- demonstrate any THREE cutting processes, including relevant minor in-line processes, and for each process:
 - correctly set up machinery for basic flat-bed cutting for TWO jobs, and
 - change the type and size of substrates and design of finished patterns according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety (WHS) factors for:
 - setting up cutting devices
 - setting up and/or operating delivery systems
- explain checks needed when:
 - cutting devices are mounted on a cylinder
 - cutting devices are attached to the machine
 - substrate is removed from the machine
- explain information concerning flat-bed hole punching/indexing/creasing and scoring found in the job documentation or production control system

For Reel Systems Only

- explain webbing configuration requirements
- determine adjustments to the unwind reel that may be needed to suit various jobs
- identify important areas of the reel delivery system that may need to be adjusted according to job specifications
- identify important areas on the machine to check to ensure the system operates effectively
- list steps to ensure the delivery system operates effectively
- determine ways the finished product can be secured for despatch
- explain how machine pressure, machine cutting depths and the need to adjust machine cutting depths are determined
- determine details of the completed sample to examine to ensure conformance to client requirements
- explain cutting tools and equipment storage required to guard against damage and deterioration
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF232 Produce basic flat-bed cut product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake minor flat-bed cutting processes including kiss cutting, hole punching, hole drilling, slotting, slitting, sheeting, creasing, scoring, and pin perforating, indexing and round cornering.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain delivery system	1.1 Delivery systems are monitored and adjusted to ensure continuous and efficient operation and ensure no damage to finished product 1.2 Substrate is added to and removed from the process according to job specifications
2. Maintain basic flat-bed cutting process	2.1 Cutting edges and knife condition are monitored and adjusted to ensure product quality meets the approved sample standard 2.2 Webbing procedures are carried out according to enterprise procedures 2.3 Cutting pressures are monitored and adjusted to ensure product

ELEMENT	PERFORMANCE CRITERIA
	quality meets the approved sample standard 2.4 Reels are spliced/joined according to job specifications 2.5 Registration of cutting devices and knife(s) is monitored and adjusted to ensure product quality meets the approved sample standard 2.6 Packing of cutting devices is monitored and adjusted to ensure product quality meets the approved sample standard
3. Maintain production process	3.1 Basic in-line printing/converting/binding/finishing process(es) are monitored and adjusted to ensure product quality meets the approved sample standard 3.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.3 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 3.4 Manual and/or automatic control is used according to job specifications 3.5 Performance is monitored and verified using the process control system according to enterprise procedures 3.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.7 Process adjustments to eliminate problems are reported according to enterprise procedures 3.8 Faulty performance of equipment is identified and reported according to enterprise procedures 3.9 Waste is sorted according to enterprise procedures
4. Identify and rectify problems and faults	4.1 Problems in flat-bed cutting machine operation are identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 4.3 Flat-bed cutting machine operation is checked to ensure correct operation 4.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 4.5 Repair/adjustment is verified prior to resumption of operations
5. Conduct shutdown of	5.1 Correct shutdown sequence is followed according to

ELEMENT	PERFORMANCE CRITERIA
production process	manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
6. Clean flat-bed cutting machine at end of run	6.1 Cutting devices and knife/knives are cleaned or replaced ready for next run 6.2 Cutting devices are sharpened 6.3 Machine bed is cleaned ready for next run 6.4 Cutting units are disengaged and cleaned ready for next run 6.5 In-line printing/converting/binding/finishing units are cleaned ready for next run 6.6 Delivery systems are disengaged and cleaned ready for next run 6.7 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.4, 3.3, 3.4, 5.1	Recognises and interprets texts to establish job requirements
Writing	3.7, 3.8, 4.1, 4.4, 6.7	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.2, 3.7, 3.8, 4.1, 4.4, 5.2	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies to supervisors or discuss job requirements with colleagues
Navigate the world of work	2.1-2.6, 3.1-3.3, 3.5, 3.7-3.9, 4.1, 4.2, 4.4, 5.1-5.3, 6.1-6.7	Complies with legislative requirements and follows organisational policies and procedures relevant to own role, particularly with regard to safe operation of machinery and equipment
Interact with	3.2, 3.7, 3.8, 4.1,	Cooperates with others as part of familiar routine

others	4.4, 5.2	activities, and contributes to specific activities requiring joint responsibility and accountability Follows accepted practices and protocols for reporting issues to supervisors
Get the work done	1.2, 2.1, 2.3, 2.5, 2.6, 3.1-3.3, 3.5, 3.6, 3.9, 4.1-4.3, 4.5, 5.1-5.3	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel OR - sheet
Maintaining MUST include EITHER:	- reel stand and rewind - web control system - sheeting section OR - feeder and delivery - sheet pick-up system - transfer system

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF232 Produce basic flat-bed cut	ICPCF232C Produce basic flat-bed cut	Updated to meet Standards for	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
product	product	Training Packages	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF232 Produce basic flat-bed cut product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce products involving a range of minor flat-bed cutting processes including: kiss cutting, hole punching, hole drilling, slotting, slitting, sheeting, creasing, scoring, and pin perforating, indexing and round cornering according to job specifications and production timeframes
- demonstrate THREE different processes, and for each process, complete TWO jobs with different types and sizes of substrate and design of finished patterns, according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain work health and safety (WHS) factors for:
 - setting up and/or operating machine transport systems
 - setting up and/or operating machine delivery systems
 - maintaining and adjusting the cutting process
 - conducting machine shutdown procedures
- identify checks needed when:
 - substrate is removed from the machine
 - packing cutting devices
 - waste is removed from the machine and surrounding area for disposal or recycling
 - cutting devices or knives are cleaned or replaced ready for the next run
 - during the machine shutdown procedure

- identify areas of the machine to monitor and adjust to ensure trouble-free operation
- explain indicators that mean knife replacement is needed
- determine when a cutting pressure adjustment is required
- explain the procedure for correcting common machine faults
- determine machine cleaning requirements at the end of the run
- determine production records to be kept or written up, and information to include in this reporting procedure
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF235 Set up machine for basic rotary cutting

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up minor rotary cutting processes, including kiss cutting, perforating, sprocket hole punching, slotting, sheeting, slitting, creasing and scoring.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Mount rotary cutting devices to cylinders	2.1 Cutting devices are correctly mounted 2.2 Cutting devices are registered and proofed 2.3 Appropriate cutting devices are selected and secured to machine according to job specifications

ELEMENT	PERFORMANCE CRITERIA
3. Set up delivery systems	3.1 Delivery systems are set up and adjusted according to job specifications 3.2 Substrate is removed from process according to job specifications
4. Set up machine	4.1 Rotary cutting devices are set up and adjusted according to job specifications 4.2 Cutting pressures are set up and adjusted according to job specifications 4.3 Counter knives/anvils are set in correct position
5. Assist in set-up for other in-line processes	5.1 Assistance is given in set-up of in-line printing/converting/binding units 5.2 Minor in-line printing processes (date stamping, numbering) are set up correctly
6. Conduct sample run	6.1 Material to be used for sample is organised correctly 6.2 Machine is set up and operated to produce a specified sample according to work health and safety requirements, manufacturer's specifications and enterprise procedures 6.3 Sample is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 6.4 Results are interpreted to determine adjustment requirements 6.5 Adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.2, 4.1, 4.2, 6.2, 6.5	Recognises and evaluates text to establish job requirements from information contained within relevant systems
Oral Communication	5.1	Participates effectively in spoken interactions to confirm or clarify understanding

Navigate the world of work	6.2, 6.3, 6.5	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	5.1	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1-1.3, 2.1, 2.2, 3.1, 3.2, 4.1-4.3, 5.1, 5.2, 6.3-6.5	- Determines priorities and sequences steps involved in clearly defined tasks - Implements actions as per instructions, making slight adjustments if necessary - Plans, identifies and assembles resources required to complete tasks - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel systems OR - sheet systems.
Setting up and adjusting MUST include EITHER:	- unwind and rewind reels - web control system - splicing/joining reels - folder and sheeter OR - feeder and delivery systems - sheet pick-up and delivery systems - transfer systems.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF235 Set up machine for basic rotary cutting	ICPCF235C Set up machine for basic rotary cutting	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF235 Set up machine for basic rotary cutting

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate all safety devices on the machinery
- demonstrate any THREE cutting processes, including relevant minor in-line processes, and for each process:
 - correctly set up machinery for basic flat-bed cutting for TWO jobs, and
 - change the type and size of substrates and design of finished patterns according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety factors for:
 - setting up and/or operating machine delivery systems
 - setting up cutting devices
- determine important areas pertinent to the relevant system:
 - to check when the feeder unit is set up
 - of the reel delivery system that may need to be adjusted according to job specifications
 - to consider during webbing procedures
- identify checks needed when:
 - cutting devices are mounted on a cylinder
 - cutting devices are attached to the machine
 - substrate is removed from the machine

- explain the rotary hole punching/indexing/creasing information found in the job documentation or production control system
- identify adjustments to the delivery systems that may be needed to suit various jobs
- list steps to ensure the delivery systems operate effectively
- explain ways the finished product can be secured for dispatch
- explain how machine pressure, machine cutting depths and the need to adjust in-line units are determined
- determine details of the completed sample to examine to ensure conformance to client requirements
- explain methods for storing cutting tools and equipment to prevent damage and deterioration
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF236 Produce basic rotary cut product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce basic rotary cut product, monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain delivery systems	1.1 Delivery systems are monitored and adjusted to ensure efficient and continuous operation and ensure no damage to finished product 1.2 Substrate is added to and removed from machine according to job specifications
2. Maintain basic rotary cutting process	2.1 Cutting edges and knife condition are monitored and adjusted to ensure product quality meets the approved sample standard 2.2 Cutting pressures are monitored and adjusted to ensure product quality meets the approved sample standard 2.3 Registration of cutting devices and knife(s) are monitored and adjusted to ensure product quality meets the approved sample

ELEMENT	PERFORMANCE CRITERIA
	standard 2.4 Packing of cutting devices is monitored and adjusted to ensure product quality meets the approved sample standard
3. Maintain production process	3.1 Basic in-line printing/converting/binding/finishing process(es) are monitored and adjusted to ensure product quality meets the approved sample standard 3.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.3 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 3.4 Manual and/or automatic control is used according to job specifications 3.5 Performance is monitored and verified using the process control system according to enterprise procedures 3.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.7 Process adjustments to eliminate problems are reported according to enterprise procedures 3.8 Faulty performance of equipment is identified and reported according to enterprise procedures 3.9 Waste is sorted according to enterprise procedures
4. Identify and rectify problems and faults	4.1 Problem in rotary cutting machine operation is identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 4.3 Rotary cutting machine operation is checked to ensure correct operation 4.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 4.5 Repair/adjustment is verified prior to resumption of operations
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Substrate waste is removed from operating area and recycled

ELEMENT	PERFORMANCE CRITERIA
	or disposed of, where required, according to regulatory requirements and enterprise procedures
6. Clean rotary cutting machine at end of run	6.1 Cutting devices and knife/knives are cleaned or replaced ready for next run 6.2 Cutting devices are sharpened 6.3 Machine bed is cleaned ready for next run 6.4 Cutting units are disengaged and cleaned ready for next run 6.5 In-line printing/converting/binding/finishing units are cleaned ready for next run 6.6 Transportation and delivery systems are disengaged and cleaned ready for next run 6.7 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 3.3, 3.4, 5.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.7, 3.8, 4.1, 4.4, 6.7	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.2, 3.7, 3.8, 4.1, 4.4, 5.2	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies to supervisors or discuss job requirements with colleagues
Navigate the World of work	2.1-2.4, 3.1-3.3, 3.5, 3.7-3.9, 4.1-4.4, 5.1-5.3, 6.1-6.7	Complies with legislative requirements and follows organisational policies and procedures relevant to own role, particularly with regard to safe operation of machinery and equipment
Interact with others	3.2, 3.7, 3.8, 4.1, 4.4, 5.2	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Follows accepted practices and protocols for reporting issues to supervisors

Get the work done	1.1, 2.1-2.4, 3.2-3.6, 3.9, 4.2, 4.3, 4.5, 5.1, 5.3	• Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency • Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans • Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• reel OR • sheet
Monitoring and adjusting MUST include EITHER:	• reel stand and rewind section • web control system • sheeting section OR • feeder and delivery system • sheet pick-up and transportation system • transfer system

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF236 Produce basic rotary cut product	ICPCF236C Produce basic rotary cut product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF236 Produce basic rotary cut product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate all safety devices on the machinery
- demonstrate any THREE cutting processes, and for each process:
 - produce rotary cut products for TWO jobs, with different types and sizes of substrate and design of finished patterns, according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety factors for:
 - setting up and/or operating machine transport systems
 - setting up and/or operating machine delivery systems
 - maintaining the cutting process
 - monitoring the rotary cutting process
 - conducting machine shutdown procedures
- identify checks needed when:
 - substrate is removed from the machine
 - waste is removed from the machine and surrounding area for disposal or recycling
 - cutting devices or knives are cleaned, stored or replaced ready for the next run
- identify areas of the delivery system to monitor to ensure trouble-free operation
- identify sectors of the basic in-line printing/converting/binding/finishing process that may need to be monitored and adjusted to meet approved standards

- explain production difficulties that can be expected during production runs and areas that may need adjustment to meet client requirements
- explain the procedure for correcting common machine faults
- identify areas of the machine that require cleaning at the end of the run
- determine production records to be kept or written up and information that should be included
- determine quality aspects to consider in a completed rotary cutting job
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF241 Set up machine for basic single or continuous folding

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up a machine for basic folding.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or production control 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job-related components is checked
2. Set up delivery systems	2.1 Delivery systems are set up and adjusted according to job specifications
3. Set up machine for basic single or continuous folding	3.1 Folding units are set up and adjusted according to job specifications 3.2 Folding rollers/belts/rails are set up and adjusted according to job specifications

ELEMENT	PERFORMANCE CRITERIA
4. Set up in-line units for basic processes	4.1 Minor in-line printing/converting/binding units are set up for basic processes and adjusted according to machine requirements and job specifications 4.2 Assistance is given setting up major in-line printing/converting/binding units
5. Conduct sample run	5.1 Material to be used for sample is organised correctly 5.2 Machine is set up and operated to produce a specified sample according to work health and safety requirements, manufacturer's specifications and enterprise procedures 5.3 Sample is visually inspected to determine adjustment requirements 5.4 Results are interpreted to determine adjustment requirements 5.5 Adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1, 3.2, 4.1, 5.2, 5.5	Recognises and evaluates text to establish job requirements from information contained within relevant systems
Oral Communication	4.2	Participates effectively in spoken interactions to confirm or clarify understanding
Navigate the world of work	5.2, 5.5	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	4.2	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1-1.3, 3.1, 3.2, 4.1, 4.2, 5.1-5.5	- Determines priorities and sequences steps involved in clearly defined tasks - Implements actions as per instructions, making slight

		adjustments if necessary - Plans, identifies and assembles resources required to complete tasks - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel OR - sheet
Setting up and adjusting MUST include EITHER:	- unwind and rewind reels - webbing procedures - web control systems - splicing/joining reels OR - feeder and delivery - sheet pick-up and transportation - transfer system - sheet transfer and control system

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF241 Set up machine for basic single or continuous folding	ICPCF241C Set up machine for basic single or continuous folding	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF241 Set up machine for basic single or continuous folding

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate all safety devices on the machinery
- correctly set up machines for basic folding for TWO jobs (if possible using different sizes and weights of substrate) EITHER with a single fold to run continuously OR a single quire fold on a sheet gather/stitch/fold/trim machine OR an automatic web-fed machine to achieve a single fold according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the work health and safety factors that must be considered when:
 - setting up and/or operating machine transport systems
 - setting folder transportation and delivery systems
 - setting up and/or adjusting the folding unit
 - adjusting machine units
- explain folding requirements information that would be found in the job documentation or production control system
- for reel systems only, identify areas of the reel stand to monitor to ensure trouble-free operation
- for sheet systems only, identify areas of the sheet-fed transportation system to monitor to ensure trouble-free operation
- identify areas of the delivery system to observe to prevent damage to the finished product
- list ways folded sheets can be secured for dispatch
- explain communication to instigate if the:

- job is out-of-square
- ink is too wet for production
- job does not coincide with the sample
- explain how to avoid substrate scratching/scuffing during transportation
- list problems to expect if the machine is running too fast
- determine checks of roller pressures for correctness
- explain the adjustment if the sheet is out-of-square
- explain possible reasons for the sheet being out-of-square, and adjustments required if the sheet will not leave the folding unit
- explain the adjustment to ensure sheets are not smudging/scuffing
- list steps to ensure correct alignment of in-line processes/units
- explain adjustments to keep units correctly positioned
- identify segments of the product to inspect at sample run completion to ensure product quality
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, machinery, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF242 Produce basic single or continuous folded product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce basic folded product, monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain delivery system	1.1 Delivery systems are monitored and adjusted to ensure accurate and continuous operation and eliminate damage to finished product 1.2 Substrate is added to and removed from the process according to job specifications
2. Maintain production process	2.1 Registration and squareness of fold are monitored and adjusted to ensure product quality meets the approved sample standard 2.2 Basic in-line printing/converting/binding/finishing process(es) are monitored and adjusted to ensure product quality meets the approved sample standard 2.3 Production process is operated in association with fellow

ELEMENT	PERFORMANCE CRITERIA
	workers and according to enterprise procedures and planned daily schedule 2.4 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 2.5 Manual and/or automatic control is used according to job specifications 2.6 Performance is monitored and verified using the process control system according to enterprise procedures 2.7 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 2.8 Process adjustments to eliminate problems are reported according to enterprise procedures 2.9 Faulty performance of equipment is identified and reported according to enterprise procedures 2.10 Waste is sorted according to enterprise procedures
3. Identify and rectify problems and faults	3.1 Problems in folding (single/continuous) machine operation are identified and reported according to enterprise procedures 3.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 3.3 Folding (single/continuous) machine operation is checked to ensure correct operation 3.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 3.5 Repair/adjustment is verified prior to resumption of operations
4. Conduct shutdown of production process	4.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 4.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 4.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
5. Clean folding (single/continuous) machine at end of run	5.1 Folding units are disengaged and cleaned ready for next run 5.2 In-line printing/converting/binding/finishing units are cleaned ready for next run 5.3 Transport and delivery systems are disengaged and cleaned ready for next run

ELEMENT	PERFORMANCE CRITERIA
	5.4 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.4, 2.5, 4.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	2.8, 2.9, 3.1, 3.4, 5.5	Enters routine data associated with production processes and enterprise procedures
Oral Communication	2.3, 2.8, 2.9, 3.1, 3.4, 4.2	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies to supervisors or discuss job requirements with colleagues
Navigate the world of work	2.1-2.4, 2.6-2.10, 3.1-3.4, 4.1-4.3, 5.1-5.4	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with others	2.3, 2.8, 2.9, 3.1, 3.4, 4.2	- Cooperates with others as part of familiar, routine activities, and contributes to specific activities requiring joint responsibility and accountability - Follows accepted practices and protocols for reporting issues to supervisors
Get the work done	1.1-1.2, 2.1-2.10, 3.2, 3.3, 3.5, 4.1-4.3	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• reel OR • sheet.
Monitoring and adjusting MUST include EITHER:	• reel stand • web control system OR • feeder and delivery system • sheet pick-up and transport system

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF242 Produce basic single or continuous folded product	ICPCF242C Produce basic single or continuous folded product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF242 Produce basic single or continuous folded product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce a single or continuous folded product for TWO jobs (if possible using different sizes and weights of substrate) either with:
- a single fold to run continuously, or,
- a single quire fold on a sheet gather/stitch/fold/trim machine, or
- an automatic web-fed machine to achieve a single fold according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety (WHS) factors for:
 - setting up and/or operating machine transport systems
 - setting up and/or operating machine delivery systems
 - using the folding machine
 - adjusting/correcting the machine
 - cleaning the machine
- identify areas of the machine to:
 - monitor to ensure trouble-free operation
 - regularly clean, and the materials to be cleaned from it
 - continuously observe to ensure smooth, trouble-free operation
- identify areas of the in-line process to monitor to ensure product quality
- explain checks needed when substrate is removed from the machine
- explain TWO causes of out-of-square folding and how each can be corrected

- determine segments of quality assurance inspected at the completion of the sample run, as well as in a completed folded job
- explain communication to be instigated if the:
 - job is out-of-square
 - ink is too wet for production
 - job does not coincide with the sample
- list the part(s) of the machine to adjust if the sheet is creasing
- identify important tasks to correctly shut down the machine
- explain work preparation required for dispatch
- explain the requirement to keep the machine clear of surface rust (condensation)
- determine production alterations needed to meet client requirements
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF243 Set up machine for basic collating or inserting (sheet/section)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up a machine for basic collating, gathering or inserting of sheets or sections, and is appropriate for binding and finishing operations, mail houses and newspapers.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job-related components is checked
2. Set up sheet/section system	2.1 Feeder and delivery systems are set up and adjusted according to job specifications 2.2 Double/misfeed detectors are set up according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	2.3 Sheet/section pick-up, transfer and transportation system is set up and adjusted according to job specifications 2.4 Transfer systems are set up and adjusted according to job specifications
3. Set up machine and conduct sample run	3.1 Collating/inserting system is set up and adjusted according to job specifications 3.2 Material to be used for sample is organised correctly 3.3 Machine is set up and operated to produce a specified sample according to Work Health and Safety (WHS) requirements, manufacturer's specifications and enterprise procedures
4. Organise sample inspection and/or testing	4.1 Sample is visually inspected and/or tested, or laboratory testing is organised, according to enterprise procedures 4.2 Results are interpreted to determine adjustment requirements 4.3 Adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1-2.4, 3.1, 3.3, 4.3	Recognises and evaluates text to establish job requirements from information contained within relevant systems
Navigate the world of work	3.3, 4.1	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Get the work done	1.1-1.3, 2.1-2.4, 3.1-3.3, 4.1-4.3	- Determines priorities and sequences steps involved in clearly defined tasks - Implements actions as per instructions, making slight adjustments if necessary - Plans, identifies and assembles resources required to complete tasks - Follows routine procedures for using digital technology by reading data from electronic monitoring and control

		systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF243 Set up machine for basic collating or inserting (sheet/section)	ICPCF243C Set up machine for basic collating or inserting (sheet/section)	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF243 Set up machine for basic collating or inserting (sheet/section)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up machines for basic collating or inserting according to job specifications, and within the production timeframe for TWO different jobs (if possible one sheet and one section) involving a minimum of FOUR products, according to listed performance criteria
- operate all safety devices on the machine.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- set up a double/misfeed sheet calliper system that ensures smooth transportation and delivery of sheets or sections through the machine
- identify largest and smallest sheet or section size that can be run through this machine
- identify areas of the machine that can be adjusted to allow for 42gsm stock
- confirm the speed the machine can operate at
- identify indicators the machine needs lubrication
- determine an acceptable collating result
- determine adjustments to the machine to alleviate 'bruising' of NCR paper
- identify circumstances in which the machine needs adjustment, and the cause of sheets creasing in the machine delivery
- consider important information concerning collating included in the job documentation or production control system
- work health and safety factors for:
 - operating and adjusting a double/misfeed sheet calliper system
 - setting up sheet/section transportation and delivery systems

- identify factors to consider when setting up the feeder
- name different types of sheet/section delivery systems
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to:

- work request documents
- double/misfeed sheet calliper system
- special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF244 Produce basic collated or inserted (sheet/section) product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce a basic collated or inserted sheet or section product, monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain operation of sheet/section transportation system on machine	1.1 Feeder and delivery systems are monitored and adjusted to ensure continuous and efficient feeding to machine 1.2 Sheet/section pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation 1.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation 1.4 Substrate is added to process according to job specifications
2. Maintain production	2.1 Collating or inserting process is monitored and adjusted to

ELEMENT	PERFORMANCE CRITERIA
process	ensure product quality meets the approved sample standard 2.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 2.3 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 2.4 Manual and/or automatic control is used according to job specifications 2.5 Performance is monitored and verified using the process control system according to enterprise procedures 2.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 2.7 Process adjustments to eliminate problems are reported according to enterprise procedures 2.8 Waste is sorted according to enterprise procedures 2.9 Basic in-line printing/converting/binding/finishing process(es) are monitored and adjusted to ensure product quality meets the approved sample standard
3. Identify and rectify problems and faults	3.1 Problems in collating or inserting (sheet/section) machine are identified and reported according to enterprise procedures 3.2 Adjustments or corrections are carried out according to specified procedures, and are consistent with operator's skill level 3.3 Collating or inserting (sheet/section) machine operation is checked to ensure correct operation 3.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 3.5 Repair/adjustment is verified prior to resumption of operations
4. Conduct shutdown of production process	4.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 4.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 4.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
5. Clean (sheet/section) machine at end of run	5.1 Collating or insert machine is cleaned ready for next run 5.2 In-line printing/converting/binding/finishing units are cleaned

ELEMENT	PERFORMANCE CRITERIA
	ready for next run 5.3 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run 5.4 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.3, 2.4, 4.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.4, 5.4	Enters routine data associated with production processes and enterprise procedures
Oral Communication	2.2, 2.7, 3.1, 3.4, 4.2	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies to supervisors or discuss job requirements with colleagues
Navigate the world of work	2.1-2.3, 2.5, 2.7-2.9, 3.1, 3.2, 3.4, 4.1-4.3, 5.1-5.4	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with others	2.2, 2.7, 3.1, 3.4, 4.2	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Follows accepted practices and protocols for reporting issues to supervisors
Get the work done	1.1-1.4, 2.1-2.7, 2.9, 3.1-3.5, 4.1, 4.3	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring

		and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF244 Produce basic collated or inserted (sheet/section) product	ICPCF244C Produce basic collated or inserted (sheet/section) product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF244 Produce basic collated or inserted (sheet/section) product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use a collating machine for basic collating (gathering and/or inserting) for TWO different jobs (if possible, one sheet and one section), involving a minimum of FOUR products, that meet job specifications, production timeframes and quality standards.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety factors:
 - when operating the machine
 - prior to adjusting the machine
- determine factors that govern the speed the machine operates at
- list circumstances that show the machine needs to be adjusted, and explain how to prevent double sheet feeds
- list checks required to shut down the machine correctly
- identify areas of the machine that need regular cleaning and must be kept clear of surface rust (condensation)
- ensure materials are cleaned from the machine
- determine items to check against client sample to ensure an acceptable collating result
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment, machinery and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF245 Set up and produce hand-collated or inserted product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to hand-collate or insert product.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked 1.4 Collating/inserting system is set up according to job specifications
2. Conduct sample run	2.1 Material to be used for sample is organised correctly 2.2 Collating or inserting system is operated to produce a specified sample according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
3. Organise sample inspection and/or testing	3.1. Sample is visually inspected and/or tested, or laboratory testing is organised, according to enterprise procedures 3.2 Results are interpreted to determine adjustment requirements 3.3 Adjustments are carried out according to product specifications
4. Maintain production process	4.1 Hand-collating process is monitored and adjusted to ensure product quality meets the approved sample standard 4.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 4.3 Production is maintained according to WHS requirements, manufacturer's specifications and enterprise procedures 4.4 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 4.5 Process adjustments to eliminate problems are reported according to enterprise procedures
5. Clean work area at end of run	5.1 Collating area is cleaned ready for next run 5.2 Waste is sorted according to enterprise procedures 5.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.4 Production records or other documentation are accurately completed, where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.4, 2.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	4.5, 5.4	Records information relating to production and machinery problems and completes production reports and other relevant documentation

Oral Communication	4.2, 4.5	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies to supervisors or discuss job requirements with colleagues
Navigate the world of work	2.2, 3.1, 4.1-4.3, 4.5, 5.1-5.4	- Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures - Understands roles and responsibilities for task and makes basic decisions on work completion parameters
Interact with others	4.2, 4.5	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Follows accepted practices and protocols for reporting issues to supervisors
Get the work done	1.1-1.4, 2.1, 2.2, 3.1-3.3, 4.1-4.4, 5.1-5.4	- Takes responsibility for planning and organising own workload, identifying ways of sequencing; and identifies and assembles required resources - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF245 Set up and produce hand-collated or inserted product	ICPCF245C Set up and produce hand-collated or inserted product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF245 Set up and produce hand-collated or inserted product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up and produce hand-collated and inserted product according to job specifications and within production timeframe
- find and use information relevant to the task from a variety of information sources
- set up and collate TWO different jobs (at least FIVE products, and if possible, one sheet job and one section job) by hand according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify important information found on the production control job ticket
- list steps to ensure important features of the production control system are followed
- determine production records to be kept or written up and the information that should be included
- identify ergonomic and work health and safety (WHS) factors for setting up the job to facilitate ease of operation
- explain facilities available to assist picking up product by hand
- identify precautions for handling NCR paper
- identify methods to separate finished sets of product
- identify methods of assistance to open sections to be inserted
- explain how printed images assure correct sequence of sections
- list steps to ensure important features of the production control system are followed
- determine areas of the finished product to be inspected
- list steps to take if the test sample is incorrect

- explain the procedure for processing remaining sheets (overs) at the completion of the job
- identify manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF261 Set up machine for basic adhesive, mechanical or thermal fastening

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up a machine for basic adhesive, mechanical or thermal fastening. Some equipment may also involve cutting, trimming, folding and/or gathering (collating) which may be assessed at the same time.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Set up delivery systems	2.1 Delivery systems are set up and adjusted according to job specifications 2.2 Substrate is removed from the process according to job specifications

ELEMENT	PERFORMANCE CRITERIA
3. Set up equipment and in-line units	3.1 Fastening system is set up and adjusted according to job specifications 3.2 Minor in-line printing/converting/binding units are set up for basic processes and adjusted according to machine requirements and job specifications 3.3 Assistance is given in set-up of major in-line printing/converting/binding units
4. Conduct sample run	4.1 Raw material to be used for sample is organised 4.2 Machine is set up and operated to produce a specified sample according to work health and safety requirements, manufacturer's specifications and enterprise procedures 4.3 Sample is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 4.4 Results are interpreted to determine adjustment requirements 4.5 Adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 2.2, 3.1, 3.2, 4.2, 4.3	Recognises and evaluates text to establish job requirements from information contained in systems or documents
Oral Communication	3.3	Participates effectively in spoken interactions to confirm or clarify understanding
Navigate the world of work	4.2, 4.3	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	3.3	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work	1.1-1.3, 2.1, 2.2,	Determines priorities and sequences steps involved in clearly defined tasks

done	3.1-3.3, 4.1-4.5	• Implements actions as per instructions, making slight adjustments if necessary • Plans, identifies and assembles resources required to complete tasks • Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• reel OR • sheet.
Setting up and adjusting MUST include EITHER:	• unwind and delivery reels • webbing procedures • web control system OR • feeder and delivery systems • sheet/section pick-up and transportation systems • transfer systems • sheet/section transfer and control system.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF261 Set up machine for basic adhesive, mechanical or thermal fastening	ICPCF261C Set up machine for basic adhesive, mechanical or thermal fastening	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF261 Set up machine for basic adhesive, mechanical or thermal fastening

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up machine for basic fastening according to job specifications and within the production timeframe
- find and use information relevant to the task from a variety of information sources
- demonstrate all safety devices on the machine
- set up machine on TWO occasions for adhesive OR mechanical OR thermal fastening, using different weights and sizes of substrate according to manufacturer's and job specifications, enterprise procedures and listed performance criteria
- use computerised control, monitoring and data entry systems, if available and appropriate.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

All Systems

- identify work health and safety (WHS) factors for:
 - setting up the machine
 - setting up the delivery systems
 - before readjusting the machine
 - working with hot melt adhesives
- determine important information concerning binding requirements found in the job documentation or production control system
- identify elements to consider when planning a binding sample
- list checks needed when using the delivery systems on the various machines
- identify ways completed work can be secured for dispatch

- explain binding techniques for different types of jobs
- determine in-line units available for these binding processes
- identify circumstances under which the machine would need to be adjusted
- determine quality aspects to consider in the completed binding job
- list steps to ensure important features of the production control system are addressed
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them

For Reel Systems Only

- describe webbing procedures commonly used in the delivery area
- identify areas to consider when setting up the web control system

For Sheet Systems Only

- determine problems likely to be encountered when setting up the sheeter

For Adhesive Or Thermal Only

- identify special delivery problems associated with adhesive machines and requirements to overcome these problems
- determine WHS safeguards necessary with hot melt adhesives
- explain methods of adhesive metering on the machine
- explain care to ensure a neat and clean adhesive binding job

For Mechanical Only

- list parts of the wire stitcher that need to be adjusted to process books of different thicknesses
- determine required positioning of the wire stitches on the book
- explain the difference between a staple and a wire stitch
- determine the appropriate wire calliper for a particular job.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF262 Produce basic adhesive, mechanical or thermal fastened product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce basic adhesive, mechanical or thermal fastened product, monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain sheet delivery system	1.1 Feeder and delivery systems are monitored and adjusted to ensure continuous and efficient feeding to machine 1.2 Sheet pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operations 1.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation 1.4 Substrate is added to process according to job specifications
2. Maintain basic adhesive/mechanical/	2.1 Registration of fastening is monitored and adjusted to ensure

ELEMENT	PERFORMANCE CRITERIA
thermal fastening process	product quality meets the approved sample standard 2.2 Wire straightness, length, cut-off and clinching pressures are monitored and adjusted to ensure product quality meets the approved sample standard OR 2.3 Adhesion is monitored and adjusted to ensure product quality meets the approved sample standard OR 2.4 Power current and dwell time is monitored and adjusted to ensure product quality meets the approved sample standard adjusted according to job specifications
3. Maintain production process	3.1 Basic in-line printing/converting/binding/finishing process(es) are monitored and adjusted to ensure product quality meets the approved sample standard 3.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.3 Production is maintained according to work health and safety requirements, manufacturer's specifications and enterprise procedures 3.4 Manual and/or automatic control is used according to job specifications 3.5 Performance is monitored and verified using the process control system according to enterprise procedures 3.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.7 Process adjustments to eliminate problems are reported according to enterprise procedures 3.8 Waste is sorted according to enterprise procedures
4. Identify and rectify problems and faults	4.1 Problems in adhesive/mechanical/thermal fastening machine are identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to specified procedures, and are consistent with operator's skill level 4.3 Adhesive/mechanical/thermal fastening machine operation is checked to ensure correct operation 4.4 Faulty performance of equipment is identified and reported according to enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
	4.5 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 4.6 Repair/adjustment is verified prior to resumption of operations
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with Work Health and Safety (WHS) requirements 5.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
6. Clean machine at end of run	6.1 Mechanical fastening unit is disengaged and cleaned ready for next run 6.2 Thermal fastening unit is disengaged and cleaned ready for next run 6.3 Glue system is washed up ready for next run, and liquid waste is disposed of according to regulatory requirements and enterprise procedures 6.4 In-line printing/converting/binding/finishing units are cleaned ready for next run 6.5 Transportation and delivery systems are disengaged and cleaned ready for next run 6.6 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.4, 2.4, 3.3, 3.4, 5.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.7, 4.1, 4.4, 6.6	Enters routine data associated with production processes and enterprise procedures

Oral Communication	3.2, 3.7, 4.1, 4.4, 4.5, 5.2	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies to supervisors or discuss job requirements with colleagues
Navigate the world of work	2.1-2.4, 3.1-3.3, 3.5, 3.7, 3.8, 4.1-4.5, 5.1-5.3, 6.1-6.6	Complies with legislative requirements and follows organisational policies and procedures relevant to own role, particularly with regard to safe operation of machinery and equipment
Interact with others	3.2, 3.7, 4.1, 4.4, 4.5, 5.2	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Follows accepted practices and protocols for reporting issues to supervisors
Get the work done	1.1-1.4, 2.1-2.4, 3.1-3.8, 4.1-4.4, 4.6, 5.1, 5.3	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF262 Produce basic adhesive, mechanical or thermal fastened product	ICPCF262C Produce basic adhesive, mechanical or thermal fastened product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF262 Produce basic adhesive, mechanical or thermal fastened product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- on TWO occasions, produce adhesive OR mechanical OR thermal fastened products, using different weights and sizes of substrate, according to manufacturer's and job specifications, enterprise procedures, production timeframes, quality standards and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety (WHS) factors for:
 - operating sheet-fed transportation and delivery systems
 - using hot melt adhesive
 - readjusting the machine, and prior to any adjustments
 - shutting down and cleaning the machine
- identify areas of the:
 - sheet-fed feeder to monitor to ensure trouble-free operation
 - delivery system to observe to maintain tension
 - delivery system to observe to prevent damage to the finished product
 - in-line process to monitor to ensure product quality
 - machine that need regular cleaning
- list checks needed when substrate is removed from the machine
- list safety clothing available for use when operating adhesive binders

- determine sectors to observe to ensure the production process is trouble-free and continuous
- explain when the machine needs to be adjusted and production alterations are needed to meet client requirements
- explain adjustment of the adhesive application on the adhesive binder
- explain straightening wire in the wire feed on the wire stitcher
- identify possible reasons for unsuccessful welding for a high-frequency welder
- list materials to clean from the machine and how to keep the machine clear of surface rust (condensation)
- determine quality aspects to consider in a completed:
 - adhesive bound job
 - high-frequency welded job
 - wire stitched job
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF263 Set up and produce hand-fastened product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up and produce hand-fastened product.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked 1.4 Fastening system is set up and adjusted according to job specifications
2. Conduct sample run	2.1 Raw material to be used for sample is organised correctly 2.2 Equipment is set up and operated to produce a specified sample according to work health and safety requirements, manufacturer's specifications and enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
	2.3 Sample is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 2.4 Results are interpreted to determine adjustment requirements 2.5 Adjustments are carried out according to product and equipment specifications
3. Maintain basic fastening process	3.1 Fastening process is monitored and adjusted to ensure quality product is achieved
4. Maintain production process	4.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 4.2 Production is maintained according to WHS requirements, manufacturer's specifications and enterprise procedures 4.3 Performance is monitored and verified using the process control system according to enterprise procedures 4.4 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 4.5 Process adjustments to eliminate problems are reported according to enterprise procedures 4.6 Faulty performance of equipment is identified and reported according to enterprise procedures 4.7 Waste is sorted according to enterprise procedures
5. Identify and rectify problems and faults	5.1 Problems fastening (adhesive/mechanical) equipment are identified and reported according to enterprise procedures 5.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 5.3 Fastening (adhesive/mechanical) equipment operation is checked to ensure correct operation
6. Clean fastening equipment	6.1 Mechanical fastening unit is disengaged and cleaned ready for next run OR 6.2 Glue system is washed ready for next run, and liquid waste is disposed of according to regulatory requirements and enterprise procedures 6.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
	6.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 6.5 Repair/adjustment is verified prior to resumption of operations 6.6 Production records or other documentation are accurately completed, where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.4, 2.2, 2.5,	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	4.5, 4.6, 5.1, 6.4, 6.6	Records information relating to production and machinery problems and completes production reports and other relevant documentation
Oral Communication	4.1, 4.5, 4.6, 5.1, 6.4	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies to supervisors or discuss job requirements with colleagues
Navigate the World of work	2.2, 2.3, 4.1-4.3, 4.5-4.7, 5.1, 5.2, 6.1-6.4, 6.6	Complies with legislative requirements and follows organisational policies and procedures relevant to own role, particularly with regard to operation and maintenance of machinery and equipment
Interact with others	4.1, 4.5, 4.6, 5.1, 6.4	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Follows accepted practices and protocols for reporting issues to supervisors
Get the work done	1.1-1.4, 2.1-2.5, 4.1-4.7, 5.1-5.3, 6.4, 6.5	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans - Seeks assistance when problems are beyond immediate responsibilities or experience

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Fastening process MUST include EITHER:	- adhesive/mechanical including gluing, stapling (stitching) or sewing (thread) OR - hand sewing including gluing, stapling (stitching) or sewing (thread).
Monitoring and adjusting MUST include EITHER:	- registration of fastening to ensure product quality meets the approved sample standard - wire straightens, length, cut-off and clinching pressures OR - adhesion to ensure product quality meets the approved sample standard OR - selecting and spacing supports - maintaining thread tension - aligning sections at the head - swelling.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF263 Set up and produce hand-fastened product	ICPCF263C Set up and produce hand-fastened product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF263 Set up and produce hand-fastened product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate all safety devices on the equipment
- demonstrate competency in TWO areas of: adhesive/thermal (drawn on cover or heated binding tape application), mechanical (wire stitcher or heavy duty stapler including saddle and flat stitching), hand sewing (single and multi-section books), and for each area:
 - correctly set up equipment and produce TWO basic hand-fastened products of different thickness and spine length to demonstrate equipment adjustment, according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- determine information concerning binding found in the job documentation or production control system
- identify work health and safety (WHS) factors for:
 - setting up and operating the machinery
 - adjusting machinery
- determine circumstances in which a machine needs to be adjusted
- identify the correct binding technique for a job
- determine parts of the wire stitcher toe adjust to process books of different thicknesses
- explain positioning of the wire stitches on the book
- explain difference between a staple and a wire stitch
- determine the appropriate wire calliper for a particular job
- explain the care to ensure a neat and clean adhesive binding job

- describe sewing stages positioning on the book
- explain ‘kettle stitch’
- identify common sewing problems likely to be met when sewing a multi-section book
- explain the purpose of sewing frames
- explain how to ensure hand sewing remains firmly together
- list problems associated with:
 - oiling a wire stitcher
 - not properly cleaning and maintaining equipment
- identify measures to prevent production interruptions
- describe an acceptable binding result
- explain consequences if wire stitches are not in the right position
- list what causes a book to be ‘stab’ stitched and special problems encountered with ‘stab’ stitching
- determine when to use ‘saddle’ stitch or ‘flat’/‘side’ stitch
- identify manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF281 Set up machine for basic laminating

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up a machine for a range of laminating processes, including laminating reel to reel, sheet to reel and reel to sheet.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Set up delivery systems	2.1 Delivery systems are set up and adjusted according to job instructions
3. Set up laminating machine	3.1 Application system cylinder is set up and adjusted according to job specifications 3.2 Adhesive application system is set up and adjusted according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	3.3 Binding pressures are set and adjusted according to job specifications 3.4 Drying system is set up and adjusted according to job specifications
4. Set up in-line units	4.1 Minor in-line printing/converting/binding units are set up for basic processes and adjusted according to machine requirements and job specifications 4.2 Assistance is given in set-up of major in-line printing/converting/binding units
5. Conduct sample run	5.1 Raw material to be used for sample is organised correctly 5.2 Machine is set up and operated to produce a specified sample according to work health and safety requirements, manufacturer's specifications and enterprise procedures 5.3 Sample is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 5.4 Results are interpreted to determine adjustment requirements 5.5 Adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1-3.4, 4.1, 5.2, 5.5	Recognises and evaluates text to establish job requirements
Oral Communication	4.2	Participates effectively in spoken interactions to confirm or clarify understanding
Navigate the world of work	5.2, 5.3	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	4.2	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability

Get the work done	1.1-1.3, 3.1-3.4, 4.1, 4.2, 5.1-5.5	• Determines priorities and sequences steps involved in clearly defined tasks • Implements actions as per instructions, making slight adjustments if necessary • Plans, identifies and assembles resources required to complete tasks • Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• reel OR • sheet.
Setting up and adjusting MUST include EITHER:	• unwind and rewind reels • webbing procedures and web control systems • splicing/joining reels • sheeter OR • feeder • sheet/section pick-up and transportation system • transfer system.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF281 Set up machine for basic laminating	ICPCF281C Set up machine for basic laminating	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF281 Set up machine for basic laminating

Modification History

Not applicable.

Performance Evidence

Knowledge Evidence

Assessment Conditions

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF282 Produce basic laminated product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce basic laminated product, monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain reel transportation system	1.1 Reel stand is monitored and adjusted to ensure efficient, continuous operation 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate, continuous positioning of the web for efficient operation 1.3 Substrate is added to the process according to job specifications 1.4 Reel rewind section is monitored and adjusted to maintain correct tension and to ensure no marks, blemishes or damage to finished product 1.5 Substrate is removed from process according to job

ELEMENT	PERFORMANCE CRITERIA
	specifications 1.6 Sheeting section is monitored and adjusted to ensure quality and efficient product delivery
2. Maintain basic laminating process	2.1 Registration of laminating is monitored and adjusted to ensure product quality meets the approved sample standard 2.2 Pressures are monitored and adjusted to ensure product quality meets the approved sample standard 2.3 Adhesion is monitored and adjusted to ensure product quality meets the approved sample standard
3. Maintain production process	3.1 Basic in-line printing/coating/converting/binding/finishing process(es) are monitored and adjusted to ensure product quality meets the approved sample standard 3.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.3 Production is maintained according to work health and safety requirements, manufacturer's specifications and enterprise procedures 3.4 Manual and/or automatic control is used according to job specifications 3.5 Performance is monitored and verified using the process control system according to enterprise procedures 3.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.7 Waste is sorted according to enterprise procedures
4. Identify and rectify problems and faults	4.1 Problems in laminating machine are identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 4.3 Laminating machine operation is checked to ensure correct operation 4.4 Process adjustments to eliminate problems are reported according to enterprise procedures 4.5 Faulty performance of equipment is identified and reported according to enterprise procedures
5. Conduct shutdown of	5.1 Correct shutdown sequence is followed according to

ELEMENT	PERFORMANCE CRITERIA
production process	manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with Work Health and Safety (WHS) requirements 5.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 5.5 Repair/adjustment is verified prior to resumption of operations
6. Clean laminating machine at end of run	6.1 Laminating machine is disengaged and cleaned ready for next run 6.2 Adhesive system is washed ready for next run and liquid waste is disposed of according to regulatory requirements and enterprise procedures 6.3 In-line printing/coating/converting/binding/finishing units are cleaned ready for next run 6.4 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run 6.5 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 3.3, 3.4, 5.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	4.1, 4.4, 4.5, 5.4, 6.5	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.2, 4.1, 4.4, 4.5, 5.2, 5.4	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies to supervisors or discuss job requirements with colleagues
Navigate the	2.1-2.3, 3.1-3.3, 3.5,	Complies with legislative requirements and follows

world of work	3.7, 4.1-4.5, 5.1-5.4, 6.1-6.5	organisational policies and procedures relevant to own role, particularly with regard to operation and maintenance of machinery and equipment
Interact with others	3.2, 4.1, 4.4, 4.5, 5.2, 5.4	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Follows accepted practices and protocols for reporting issues to supervisors
Get the work done	2.1-2.3, 3.1-3.6, 4.1-4.3, 5.1-5.3, 5.5	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF282 Produce basic laminated product	ICPCF282C Produce basic laminated product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF282 Produce basic laminated product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- operate laminating machine to complete TWO two-ply jobs on different substrates and of different sizes (if possible, including one in-line process) according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety (WHS) factors for:
 - operating web machine transport and delivery systems
 - maintaining laminating and in-line processes
- determine areas of the reel stand to monitor to ensure trouble-free operation
- list checks needed when substrate is removed from the machine
- explain how to assure registration of laminating
- identify areas of in-line processes to monitor to ensure a quality product
- explain laminating problems that may occur during operation of the machine
- identify adjustments or correction procedures that may be needed to ensure accurate operation of the process, and alternations that may be required to production to meet client requirements
- identify important tasks to correctly shut down, and how to keep the machine clear of surface rust (condensation)
- identify areas of the machine that need regular cleaning, and the materials that need to be cleaned from the machine
- determine quality aspects to consider in a completed laminated job

- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF294 Set up profile cutting for envelope manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to correctly set up profile cutting equipment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Set up profile cutting	1.1 All details required for the job are checked and confirmed against job specifications 1.2 Correct materials are checked and available for the job 1.3 Adhesives are appropriate for the substrate, application process and machine 1.4 Work area is made safe and ready for production according to safety requirements 1.5 Profile cutting unit including profile knives, and where appropriate, fly knives, is set up according to job specifications 1.6 Blades are checked for sharpness and fitted as necessary, with units calibrated according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	1.7 Settings are checked against job specifications before production is commenced 1.8 Machine is stepped to ensure profile is in the correct position and paper tension is accurate 1.9 Envelope shape and size conforms to job specifications and cuts are clean and meet quality requirements
2. Confirm quality	2.1 Sample from the machine is selected and checked to ensure it conforms to quality standards 2.2 Adjustments are made when standards are not met 2.3 Samples are continuously monitored for defects, and defects are removed 2.4 Efficiency, quality and output rate of production run are monitored for problems, and any deficiencies resolved 2.5 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards 2.6 Locations of all emergency shutdown buttons and triggers are known

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.5-1.7, 1.9	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Navigate the world of work	1.4, 1.9, 2.1, 2.5, 2.6	Complies with legislative requirements and follows organisational policies and procedures relevant to own role, particularly with regard to safety
Get the work done	1.1-1.3, 1.5-1.8, 2.1-2.5	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Plans, identifies and assembles resources required to complete tasks - Responds to predictable problems and implements

		standard or logical solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF294 Set up profile cutting for envelope manufacture	ICPCF294C Set up profile cutting for envelope manufacture	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF294 Set up profile cutting for envelope manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up profile cutting units for manufacturing banker, open-sided wallet, open-ended pocket and automatic filling envelopes, according to job specifications and within the production timeframe.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify common faults associated with profile cutting, and causes and methods to correct
- explain how blades are checked for sharpness in accordance with enterprise and work health and safety requirements
- identify relevant enterprise documentation procedures and other documentation, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to and use of:

- job sheets, work tickets or processing orders
- profile cutting machinery used for cutting envelope profiles
- special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF297 Clean sack and bag machines

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to clean and check a sack and bag machine with minimum downtime.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for cleaning	1.1 Machinery is safely switched off before cleaning is started 1.2 Cleaning equipment and materials most suitable for the machine are selected
2. Commence cleaning	2.1 Vacuum systems are checked for wear, opened and cleaned with compressed air, and suction replaced if necessary 2.2 Rollers and drums are checked for wear and cleaned 2.3 Jaws and grippers are cleaned and checked for wear 2.4 Glue units are checked for wear and cleaned, and excess glue and build-up removed from glue nipples 2.5 Glue applicators are cleaned and checked for wear

ELEMENT	PERFORMANCE CRITERIA
	2.6 Hot melt residues are removed and glue pot is cleaned 2.7 Base and underneath of machine are cleaned of print ink and glue residue 2.8 Entire machine is blown down, top to bottom, and all grease and oil is removed from components, housings and the floor 2.9 Cleaning methods which are safe, avoid harm to the environment and follow the manufacturer's instructions are used
3. Complete cleaning	3.1 Used cleaning agents and waste materials are disposed of safely 3.2 When cleaning is finished, machine is checked to ensure it is safe to operate, and all machine guarding is replaced or repositioned in safe working order 3.3 Obvious faults and wear are documented and reported

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.9	Comprehends information contained in instructions
Writing	3.3	Documents information required for reporting faults or discrepancies
Navigate the world of work	1.1, 2.9, 3.1, 3.2	Complies with work health and safety (WHS) and legislative requirements, and follows organisational policies and procedures relevant to own role
Get the work done	1.2, 2.1-2.8	- Plans, identifies and assembles resources required to complete tasks - Follows directions to complete familiar tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF297 Clean sack and bag machines	ICPCF297C Clean sack and bag machines	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF297 Clean sack and bag machines

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely clean and check a sack and bag machine with minimum downtime according to manufacturer's specifications and work health and safety (WHS) regulations.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list common faults associated with sack or bag manufacturing machines, the causes, and how to correct them
- identify environmental obligations to be observed
- explain WHS procedures for using cleaning fluids and equipment.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to a sack or bag machine, relevant facilities, special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF298 Run and monitor sack and bag machines

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to run and monitor sack and bag machines with a prescribed range of functions involving known routines and procedures, with some accountability for the quality of outcomes.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Monitor production process	1.1 All details required for the job are checked and confirmed against job specifications 1.2 Supply of materials throughout the run is maintained 1.3 Paper tension is monitored on an ongoing basis 1.4 Machine is run at optimum speed for maintaining quality outputs
2. Maintain quality	2.1 Location of all emergency shutdown buttons and triggers are known 2.2 Sample from the machine is selected and checked to ensure it matches the required standards

ELEMENT	PERFORMANCE CRITERIA
	2.3 Adjustments are made when standards are not met 2.4 Each in-line process is monitored and minor adjustments are made during production, if required 2.5 Samples are continuously monitored for defects, and defects are removed 2.6 Efficiency, quality and output rate of the production run are monitored for problems, and any deficiencies resolved 2.7 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards
3. Identify problems	3.1 Faults which affect quality of the sacks or bags are identified and rectified 3.2 Problems that reduce the output rate are identified and fixed 3.3 Faults that affect efficient operation of equipment are identified and resolved

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Navigate the world of work	1.4, 2.1-2.3, 2.7	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Get the work done	1.1-1.3, 2.2, 2.4-2.7, 3.1-3.3	- Plans, identifies and assembles resources required to complete tasks - Responds to predictable problems and implements standard or logical solutions related to own role in immediate work environment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF298 Run and monitor sack and bag machines	ICPCF298C Run and monitor sack and bag machines	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF298 Run and monitor sack and bag machines

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate all safety devices on the machine
- maintain throughput of sack or bag machines consistently over a period of time, according to job specifications and unit requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list common faults associated with sack or bag manufacturing machines, the causes and how to correct them
- identify locations of all emergency shutdown buttons and triggers
- identify quality standards for jobs.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to a sack or bag machine, relevant facilities, special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF300 Run and monitor in-line tube making machine for sack or bag manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to run, monitor and adjust in-line tube making machines for the manufacture of sacks or bags, including production tasks related to managing waste, resolving issues and monitoring defects.

It applies to individuals who assist in the preparation and operation of sack and bag equipment. They generally work under supervision but have some responsibility in maintaining the production process and ensuring quality output.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPCBF298	Run and monitor sack and bag machines

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>

ELEMENT	PERFORMANCE CRITERIA
1. Monitor throughput	1.1 Machine is stepped to ensure scores and folds are in correct position and paper tension is correct 1.2 Guide positions are monitored and adjusted if necessary to ensure adhesive is applied evenly and in the correct position 1.3 Multi-walls adhere correctly and without creasing 1.4 Paper moisture is monitored and correct moisture levels are maintained 1.5 Perforation occurs to the correct depth and in the right place 1.6 Creasing units and folding units work in the correct location 1.7 Folds and guillotine cuts are correctly placed 1.8 Glues dry at correct rates for in-line processes 1.9 All units run at the speed required by enterprise quality standards
2. Confirm quality of output	2.1 Sample from the machine is selected and checked to ensure it conforms to required quality standards 2.2 Adjustments are made when standards are not met 2.3 Each in-line process is monitored and minor adjustments are made during production, if required 2.4 Samples are continuously monitored for defects, and defects are removed 2.5 Efficiency, quality and output rate of the production run are monitored for problems, and any deficiencies resolved 2.6 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards
3. Rectify quality of output	3.1 Faults which affect quality of sacks or bags are identified and rectified 3.2 Problems that reduce output rate are identified and fixed 3.3 Faults that affect efficient operation of equipment are identified and resolved

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.9, 2.1, 2.6	Interprets textual information and establishes requirements to ensure tasks are completed in accordance with required standards
Navigate the world of work	1.9, 2.1, 2.6	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Get the work done	1.1, 1.2, 1.4-1.9, 2.1-2.6, 3.1-3.3	- Plans, identifies and assembles resources required to complete tasks - Sequences and schedules activities required to complete tasks and monitors implementation making adjustments as necessary - Responds to predictable problems and implements standard or logical solutions as required by job role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF300 Run and monitor in-line tube making machine for sack or bag manufacture	ICPCF3100C Run and monitor in-line tube making machine for sack or bag manufacture	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF300 Run and monitor in-line tube making machine for sack or bag manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- run and monitor in-line tube making machines to job specifications and enterprise quality standards for the manufacture of sacks or bags

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify common faults associated with in-line tubing machines, and explain their causes and how to correct
- explain different types of adhesive and their drying time
- explain the procedure for quality checks
- identify enterprise documentation procedures, enterprise quality standards and enterprise faults procedures relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to an in-line scoring, folding and gluing machine used in the manufacture of sacks and bags.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF301 Run and monitor in-line bottom making machine for sack or bag manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to operate and monitor an in-line bottom making machine for the manufacture of sacks or bags with minimum downtime.

This unit applies to skilled operators working in the sacks and bags area in the printing industry who may have to solve problems, provide leadership and guidance to others, and who have some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPCBF298	Run and monitor sack and bag machines

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Monitor production	1.1 Details required for the job are checked and confirmed against

ELEMENT	PERFORMANCE CRITERIA
process	job specifications 1.2 Supply of materials throughout the run is maintained 1.3 Paper tension is monitored on an ongoing basis 1.4 Machine is run at optimum speed for maintaining quality of output 1.5 Machine is adjusted to maintain quality of output
2. Monitor production	2.1 Correct perforation alignment is maintained 2.2 Pick-up rollers are working correctly and pressure and timing are maintained 2.3 Glue patch applicator or glue impression roller remains clear and dispenses required amount of glue 2.4 Doctor blades and hot melt unit are operating correctly 2.5 Timing between all units is maintained or adjusted to avoid production problems 2.6 Overall production is monitored and adjustments made to avoid production problems and improve production speeds
3. Maintain quality	3.1 Correct procedures for removal of waste are followed according to enterprise procedures 3.2 Samples are continuously monitored for defects, and defects are removed 3.3 Efficiency, quality and output rate of production run are monitored for problems, and any deficiencies resolved 3.4 Locations of all emergency shutdown buttons and triggers are known
4. Identify problems and rectify	4.1 Faults which affect quality of the sacks or bags are identified and rectified 4.2 Problems that reduce rate of output are identified and fixed 4.3 Faults that affect efficient operation of equipment are identified and resolved

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1	Interprets textual information to establish and check job requirements and to aid planning process
Navigate the world of work	3.1, 3.4	Recognises and follows legislative and organisational procedures for production processes in relation to own role
Get the work done	1.1-1.5, 2.1-2.6, 3.1-3.3, 4.1-4.3	- Plans, identifies and assembles resources required to complete tasks - Sequences and schedules activities required to complete tasks and monitors implementation, making adjustments as necessary - Identifies and responds to predictable problems and implements standard or logical solutions as required by job role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF301 Run and monitor in-line bottom making machine for sack or bag manufacture	ICPCF3101C Run and monitor in-line bottom making machine for sack or bag manufacture	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF301 Run and monitor in-line bottom making machine for sack or bag manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly operate an in-line bottom making machine for the manufacture of sacks or bags according to job specifications and enterprise procedures
- ability to anticipate, identify and rectify production problems with minimum downtime.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify common faults associated with setting up in-line scoring, folding and gluing machines, and how to correct them
- explain procedures for quality assurance
- explain enterprise documentation procedures including quality standards, production standards and faults procedures.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to an in-line bottom-making machine for sack or bag manufacture.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF302 Set up and monitor in-line scoring, folding and gluing machine for sack or bag manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up, monitor and adjust in-line scoring, folding and gluing machines and materials used in the manufacture of sacks or bags.

It applies to individuals who work under direct supervision with limited responsibility for maintaining the production process and ensuring output is in accordance with quality standards.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPCBF298	Run and monitor sack and bag machines

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Set up and adjust units	1.1 All details required for the job are checked and confirmed

ELEMENT	PERFORMANCE CRITERIA
	against job specifications 1.2 Correct materials and tools are checked and available for the job 1.3 Adhesives are appropriate for the substrate, application process and machine 1.4 Work area is safe and ready for production according to safety requirements 1.5 Blades are sharp and fitted as necessary and units are calibrated according to job specifications 1.6 Settings are checked against job specifications before production is commenced 1.7 Machine is stepped to ensure scores and folds are in correct position and paper tension is corrected/adjusted
2. Monitor throughput	2.1 Once settings are fixed, unit is run at speed required to produce a quality product 2.2 Machine is monitored to ensure scores and folds are in correct position and paper tension is correct 2.3 Guide positions are monitored to ensure adhesive is applied evenly and in correct position 2.4 Paper moisture is monitored and correct moisture levels are maintained 2.5 Folds and guillotine cuts are correctly placed 2.6 Glues dry at correct rates for substrate and adequate fibre tears are visible
3. Confirm quality of output	3.1 Sample from the machine is selected and checked to ensure it conforms to required quality standards 3.2 Adjustments are made when standards are not met 3.3 Each in-line process is monitored and minor adjustments are made during production, as necessary 3.4 Samples are continuously monitored for defects, and defects are removed 3.5 Efficiency, quality and output rate of production run are monitored for problems, and any deficiencies resolved 3.6 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards 3.7 Locations of all emergency shutdown buttons and triggers are known

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.5, 1.6	Interprets textual information to establish and check job requirements and to aid planning process
Navigate the world of work	1.4, 3.1, 3.6, 3.7	Recognises and follows legislative and organisational procedures for production processes in relation to own role
Get the work done	1.1-1.7, 2.1-2.6, 3.1-3.6	- Sequences and schedules activities required to complete tasks and monitors implementation, making adjustments as necessary - Plans, identifies and assembles resources required to complete tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF302 Set up and monitor in-line scoring, folding and gluing machine for sack or bag manufacture	ICPCF3102C Set up and monitor in-line scoring, folding and gluing machine for sack or bag manufacture	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF302 Set up and monitor in-line scoring, folding and gluing machine for sack or bag manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up and monitor in-line scoring, folding and gluing machines used in the manufacture of sacks or bags according to job specifications and within the production timeframe.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain common faults associated with in-line scoring, folding and gluing machines, the causes, and how to correct
- identify enterprise quality standards relevant to this task
- explain different types of adhesive and their drying time
- explain correct procedure for maintenance of blades.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, materials and equipment such as an in-line scoring, folding and gluing machine used in the manufacture of sacks and bags.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF303 Run and monitor envelope manufacturing machines

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to run, monitor and adjust envelope manufacturing machines and maintain the production process.

It applies to individuals who work under direct supervision with limited responsibility for ensuring output is in accordance with quality standards and issues are resolved with minimum downtime.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Monitor production process	1.1 All details required for the job are checked and confirmed against job specifications 1.2 Correct materials and tools are checked and available for the job 1.3 Supply of materials throughout run is maintained 1.4 Work area is safe and ready for production according to safety requirements

ELEMENT	PERFORMANCE CRITERIA
	1.5 Machine is run at optimum speed for maintaining quality output 1.6 Samples from the machine are selected and checked to ensure they conform with required quality standards 1.7 Machines are adjusted to maintain quality of output
2. Maintain quality	2.1 Correct procedures for removal of waste are followed according to enterprise procedures 2.2 Samples are continuously monitored for defects, and defects are removed 2.3 Efficiency, quality and output rate of production run are monitored for problems, and any deficiencies resolved 2.4 Locations of all emergency shutdown buttons and triggers are known
3. Identify problems	3.1 Faults which affect quality of envelopes are identified and rectified 3.2 Problems that reduce rate of output are identified and fixed 3.3 Faults that affect efficient operation of equipment are identified and resolved

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1	Interprets textual information to establish and check job requirements and to aid planning process
Navigate the world of work	1.4, 1.6, 2.1, 2.4	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Get the work done	1.1-1.7, 2.1-2.3, 3.1-3.3	- Sequences and schedules activities required to complete tasks and monitors implementation, making adjustments as necessary - Plans, identifies and assembles resources required to complete tasks

		Responds to predictable problems and implements standard or logical solutions related to own role in immediate work environment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF303 Run and monitor envelope manufacturing machines	ICPCF3103C Run and monitor envelope manufacturing machines	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF303 Run and monitor envelope manufacturing machines

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate how to maintain throughput of envelope manufacturing machines consistently, according to job specifications, safety requirements and quality standards
- locate and operate all safety devices on the machine.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain common faults associated with envelope manufacturing machines, the causes and how to correct
- identify enterprise quality standards, documentation procedures and fault procedures relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, materials and equipment used to manufacture envelopes.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF305 Produce single-faced web

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce a single-faced web for corrugated board manufacture, including inspecting and maintaining production quality, and identifying and rectifying problems.

It applies to individuals who generally work under direct supervision and perform a range of mainly routine tasks such as maintaining, cleaning and shutting down machinery and equipment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Inspect and adjust quality	1.1 Inspection and/or testing of sample is organised 1.2 Sample is visually inspected and/or tested according to enterprise procedures 1.3 Results are interpreted to determine adjustment requirements 1.4 Adjustments are carried out according to product and machine specifications

ELEMENT	PERFORMANCE CRITERIA
2. Maintain operation of reel transportation system	2.1 Reel stand is monitored and adjusted to ensure efficient continuous operation 2.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web and efficient operation 2.3 Substrate is added to the process according to job specifications
3. Maintain single facing process	3.1 Starch delivery system is monitored and adjusted to suit corrugating process and according to job specifications 3.2 Heat delivery system is monitored and adjusted to suit corrugating process and according to job specifications 3.3 Steam delivery system is monitored and adjusted to suit corrugating process and according to job specifications 3.4 Corrugating roll and pressure rolls are monitored and adjusted to suit corrugating process and according to job specifications 3.5 Speed of machine is optimised according to running conditions 3.6 Appropriate quantity of paper is run with a minimum of wastage
4. Maintain in-line process(es)	4.1 Coating units are monitored and adjusted to suit corrugating process and according to job specifications 4.2 Waxing units are monitored and adjusted to suit corrugating process and according to job specifications 4.3 Slitters are monitored and adjusted according to job specifications 4.4 Cut-off knife is monitored and adjusted according to job specifications
5. Synchronise machine operation	5.1 Machine down-time is minimised during flute, grade or deckle changes 5.2 Quality of board is maintained according to enterprise procedures or client acceptance standard 5.3 Machine speed is optimised and waste minimised
6. Maintain production process	6.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 6.2 Production is maintained according to Work Health and Safety (WHS) requirements, manufacturer's specifications and enterprise

ELEMENT	PERFORMANCE CRITERIA
	procedures 6.3 Manual and/or automatic control is used according to job specifications 6.4 Performance is monitored and verified using the process control system according to enterprise procedures 6.5 Starch performance is monitored and adjusted throughout production run 6.6 Quality checks are carried out on a regular basis and adjustments made as necessary
7. Identify and rectify problems	7.1 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 7.2 Process adjustments to eliminate problems are reported according to enterprise procedures 7.3 Faulty performance of equipment is identified and reported according to enterprise procedures 7.4 Waste is sorted according to enterprise procedures 7.5 Problems in corrugator operation are identified and reported according to enterprise procedures 7.6 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 7.7 Corrugator operation is checked to ensure correct operation
8. Conduct shutdown of production process	8.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 8.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 8.3 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 8.4 All product is removed from operating area 8.5 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 8.6 Repair/adjustment is verified prior to resumption of operations
9. Clean and wash up	9.1 In-line wax and coating units are cleaned ready for next run 9.2 Starch delivery system is washed ready for next run and liquid waste is disposed of according to regulatory requirements and enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
	9.3 Reel feed and transportation systems are disengaged and cleaned ready for next run 9.4 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.4, 2.3, 3.1-3.4, 4.1-4.4, 6.2, 6.3, 8.1	Recognises and evaluates text to establish job requirements from information contained within relevant systems
Writing	7.2, 7.3, 7.5, 8.5, 9.4	Uses clear and specific language to record problems and document other information according to enterprise procedures
Oral Communication	6.1, 7.2, 7.3, 7.5, 8.2, 8.5	Participates effectively in spoken interactions to report issues or to confirm or clarify requirements
Navigate the world of work	1.2, 6.1, 6.2, 6.4, 6.6, 7.2-7.6, 8.1-8.3, 8.5, 9.1-9.4	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	6.1, 7.2, 7.3, 7.5, 8.2, 8.5	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Follows accepted practices and protocols for reporting issues to supervisors
Get the work done	1.1-1.4, 2.1-2.3, 3.1-3.6, 4.1-4.4, 6.1-6.6, 7.1, 7.4, 7.6, 7.7, 8.1-8.4, 8.6, 9.4	- Sequences and schedules activities required to complete tasks and monitors implementation making adjustments as necessary - Plans, identifies and assembles resources required to complete tasks - Recognises and anticipates an increasing range of familiar problems, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring

		and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF305 Produce single-faced web	ICPCF3105C Produce single-faced web	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF305 Produce single-faced web

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- perform at least TWO runs on the single-facer to produce TWO different types of single-faced web for corrugated board manufacture, according to manufacturer's and job specifications and enterprise procedures including inspecting the quality of the product and identifying and rectifying problems.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain significant work health and safety risks workers face when producing single-faced web, and measures employed to prevent injury and/or illness
- identify principle support systems on line to the corrugating machine and describe how the operator can effectively control and monitor these systems
- explain which sections of the single-facer have higher potential for operational problems during the run
- describe product faults commonly found during production runs and explain how can they be corrected
- describe how settings are monitored and adjusted during the run to cater for the following: in-feed, web alignment control, pre-conditioners, adhesive application, corrugation, single-facer, steam delivery, heating of web and speed
- identify which product factors can be monitored visually/manually, and explain how these can be adjusted to respond to problems found by staff operating end stages of the corrugator machine
- explain functions that must be attended to for the wash-up and shutdown of the single-facer if it will be idle for two or more days

- identify machine manuals, safety and other documentation relevant to the task, where they are kept, and the information contained in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to and use of special purpose tools, materials and equipment including an in-line corrugating machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF306 Set up machine for basic carton folding and gluing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up and adjust a machine for basic carton folding and gluing to ensure the finished product is in accordance with specifications and requirements.

It applies to individuals who work under direct supervision but have limited responsibility with preparing materials, equipment and machinery to ensure the production process is maintained.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Set up carton blank transportation system	1.1 Feeder is set up and adjusted according to job specifications 1.2 Carton blank pick-up and transportation system is set up and adjusted according to job specifications 1.3 Transfer systems are set up and adjusted according to job specifications

ELEMENT	PERFORMANCE CRITERIA
2. Set up carton delivery system	2.1 Delivery is set up and adjusted according to job specifications 2.2 Substrate is removed from process according to job specifications
3. Set up machine for basic folding and gluing (single/continuous)	3.1 Folding units are set up and adjusted according to job specifications 3.2 Folding rollers/belts/rails are set up and adjusted according to job specifications 3.3 Gluing system is set up and adjusted according to job specifications using either glue wheel or one glue head
4. Conduct sample run	4.1 Material to be used for sample is organised correctly 4.2 Machine is set up and operated according to Work Health and Safety (WHS) requirements, manufacturer's specifications and enterprise procedures to produce a specified sample 4.3 Slitters are monitored and adjusted according to job specifications 4.4 Sample is visually inspected and/or tested for accuracy of folds, fibre tear, opening force, fluff and glue placement according to enterprise procedures
5. Readjust settings	5.1 Results are interpreted to determine adjustment requirements 5.2 Adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1, 2.2, 3.1-3.3, 4.2-4.4, 5.2	Recognises and interprets text to confirm work requirements from information contained within relevant specifications and enterprise documents
Navigate the world of work	4.2, 4.4	Recognises and follows organisational and legislative requirements associated with own role

Get the work done	1.1-1.3, 2.1-2.2, 3.1-3.3, 4.1-4.4, 5.1, 5.2	• Determines priorities and sequences steps involved in clearly defined, familiar tasks • Implements actions as per instructions, making slight adjustments if necessary • Plans, identifies and assembles resources required to complete tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF306 Set up machine for basic carton folding and gluing	ICPCF3106C Set up machine for basic carton folding and gluing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF306 Set up machine for basic carton folding and gluing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up a machine, on at least FOUR occasions, for basic straight line folding and gluing of cartons with different weights and sizes of carton board according to manufacturer's and job specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain information concerning folding requirements found in the job documentation or production control system
- explain work health and safety factors for:
 - setting up folder transportation and delivery systems
 - setting up and/or adjusting the folding unit
 - adjusting the inkjet printer
 - working with hot melt adhesives
- describe areas of the sheet-fed transportation system to monitor to ensure trouble-free operation
- identify areas of the delivery system to observe to prevent damage to the finished product
- describe ways that folded sheets can be secured for dispatch
- explain causes of scratching/scuffing of substrate during transportation
- describe what determines speed of the machine
- give a detailed account of problems to expect if the machine is running too fast
- demonstrate how roller pressures can be checked for correctness
- explain adjustments to make if the sheet is out-of-square

- provide possible reasons for the sheet being out-of-square
- describe what adjustments to make to ensure sheets are not smudging/scuffing
- recommend adjustments to make if the sheet does not leave the folding unit
- list steps to ensure correct alignment of the inkjet printer
- explain adjustments to make to keep units correctly positioned
- explain what determines the correct binding technique for a job
- describe methods of adhesive metering present on the machine
- explain why it is important to take care to ensure a neat and clean adhesive binding job
- identify segments of quality assurance to inspect at the completion of the sample run
- recommend communication actions to take if the job is out-of-square, if the ink is too wet for production, or if the job does not conform to quality assurance checks
- identify machine manuals and safety documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to and use of special purpose tools, materials and equipment including a Royal 40, a Bobst Media, or a Bobst Domino machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF307 Produce double-faced web

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely operate, adjust, monitor and shut down equipment and machinery used to produce double-faced web for corrugated board manufacture.

It applies to performing tasks such as monitoring machinery operations, dealing with routine problems and reporting production and machinery faults.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Inspect and adjust quality	1.1 Inspection and/or testing of sample is organised 1.2 Sample is visually inspected and/or tested according to enterprise procedures 1.3 Results are interpreted to determine adjustment requirements 1.4 Adjustments are carried out according to product and machine specifications
2. Maintain operation of	2.1 Reel stand is monitored and adjusted to ensure efficient

ELEMENT	PERFORMANCE CRITERIA
reel transportation system	continuous operation 2.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web and efficient operation 2.3 Substrate is added to the process according to job specifications
3. Maintain double-facing process	3.1 Starch delivery system is monitored and adjusted to suit corrugating process and according to job specifications 3.2 Heat delivery system is monitored and adjusted to suit corrugating process and according to job specifications 3.3 Speed of machine is optimised according to running conditions 3.4 Appropriate quantity of paper is run
4. Maintain in-line process(es)	4.1 Waxing units are monitored and adjusted to suit corrugating process and according to job specifications 4.2 Coating units are monitored and adjusted to suit corrugating process and according to job specifications 4.3 Tape dispensing units are monitored and adjusted to suit corrugating process and according to job specifications 4.4 Slitters are monitored and adjusted according to job specifications 4.5 Cut-off knife is monitored and adjusted according to job specifications
5. Synchronise machine operation	5.1 Machine downtime is minimised during flute, grade or deckle changes 5.2 Quality of board is maintained according to enterprise procedures or client acceptance standard 5.3 Machine speed is optimised and waste minimised
6. Maintain production process	6.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 6.2 Production is maintained according to Work Health and Safety (WHS) requirements, manufacturer's specifications and enterprise procedures 6.3 Manual and/or automatic control is used according to job specifications 6.4 Performance is monitored and verified using the process

ELEMENT	PERFORMANCE CRITERIA
	control system according to enterprise procedures 6.5 Starch performance is monitored and adjusted throughout production run 6.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 6.7 Process adjustments to eliminate problems are reported according to enterprise procedures 6.8 Faulty performance of equipment is identified and reported according to enterprise procedures 6.9 Waste is sorted according to enterprise procedures 6.10 Quality checks of product are undertaken on a regular basis and adjustments made as required
7. Identify and rectify problems	7.1 Problems in corrugator operation are identified and reported according to enterprise procedures 7.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 7.3 Corrugator operation is checked to ensure correct operation
8. Conduct shutdown of production process	8.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 8.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 8.3 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 8.4 All product is removed from operating area 8.5 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 8.6 Repair/adjustment is verified prior to resumption of operations
9. Clean and wash up corrugator at end of run	9.1 In-line wax, coating and tape dispensing units are cleaned ready for next run 9.2 Starch delivery system is washed ready for next run, and liquid waste is disposed of according to regulatory requirements and enterprise procedures 9.3 Reel feed and transportation systems are disengaged and cleaned ready for next run 9.4 Production records or other documentation are accurately

ELEMENT	PERFORMANCE CRITERIA
	completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.4, 2.3, 3.1, 3.2, 4.1-4.5, 6.2, 6.3, 8.1	Recognises and evaluates text to establish job requirements from information contained in procedures or systems
Writing	6.7, 6.8, 8.5, 9.4	Uses clear language to record problems and document other information according to enterprise requirements
Oral Communication	6.1, 6.7, 6.8, 7.1, 8.2, 8.5	- Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies - Participates effectively in spoken interactions to confirm or clarify requirements
Navigate the world of work	1.2, 5.2, 6.1, 6.2, 6.4, 6.7-6.9, 7.1, 7.2, 8.1, 8.3, 8.5, 9.1-9.4	Recognises and follows all procedures for operation and maintenance of equipment, incorporating regulatory requirements, enterprise procedures or client standards
Interact with others	6.1, 6.7, 6.8, 7.1, 8.2, 8.5	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.4, 2.1-2.3, 3.1-3.4, 4.1-4.5, 5.1-5.3, 6.2-6.6, 6.9, 6.10, 7.1-7.3, 8.1-8.6, 9.4	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Plans, identifies and assembles resources required to complete tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF307 Produce double-faced web	ICPCF3107C Produce double-faced web	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF307 Produce double-faced web

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly and safely perform at least TWO runs on the double backer machine to produce TWO different types/classes of product, according to manufacturer's and job specifications and enterprise procedures
- monitor operations and adjust equipment and machinery as required to ensure production quality
- accurately complete relevant enterprise production records/reports when producing double-faced web.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify significant work health and safety risks to workers operating machinery and undertaking this activity
- identify measures employed to prevent injury and/or illness in the case of the risks identified previously
- identify principle support systems on line to the corrugating machine
- explain how support systems are used to effectively control and monitor the corrugator
- identify sections of the double backer with the highest potential for operational problems during the run
- describe product faults commonly found during production runs, and how they can be corrected
- describe how settings for the following factors are monitored and adjusted during the run: in-feed, web alignment control, adhesive application, double backer, steam delivery, heating of web and speed

- identify product factors monitored visually/manually by staff operating end stages of the corrugator machine
- outline adjustments to make in response to problems found by staff operating end stages of the corrugator machine
- identify functions that must be attended to during wash-up and shutdown of the machine if it will be idle for two or more days
- identify key information contained in machine manuals, safety and other documentation relevant to producing double-faced web, and where they are kept.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Converting, Binding and Finishing field of work and include access to and use of special purpose tools, equipment (including in-line double back corrugating equipment) and materials used to produce double-faced web.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF309 Produce complex folded and glued cartons

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce complex folded and glued products while maintaining the production process and machinery operation.

It applies to individuals who work under direct supervision with limited responsibility in preparing materials and equipment and resolving issues to produce a finished product.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain operation of carton blank system	1.1 Feeder is monitored and adjusted to ensure continuous and efficient feeding to machine 1.2 Carton blank pick-up and transportation system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation 1.3 Transfer systems are monitored and adjusted to ensure correct and continuous carton blank handling and efficient operation 1.4 Substrate is added to process according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	1.5 Delivery is monitored and adjusted to ensure quality and efficient product delivery
2. Maintain complex carton folding and gluing process	2.1 Registration and accuracy of folds are monitored and adjusted to ensure product quality meets the approved sample standard 2.2 Gluing process is monitored and adjusted to ensure accuracy of glue application and strength of adhesion conforms to quality standards
3. Maintain operation of production process	3.1 Production process is operated in association with fellow workers and according to enterprise specifications and planned daily schedule 3.2 Production is maintained according to work health and safety requirements, manufacturer's specifications and enterprise procedures 3.3 Performance is monitored and verified using the process control system according to enterprise procedures 3.4 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.5 Process adjustments to eliminate problems are reported according to enterprise procedures 3.6 Faulty performance of equipment is identified and reported according to enterprise procedures 3.7 Waste is sorted according to enterprise procedures
4. Identify and rectify problems	4.1 Problems in folding and gluing machine operation are identified and reported according to enterprise requirements 4.2 Adjustments or corrections are carried out according to specified procedures and consistent with operator's skill level 4.3 Complex folding/gluing machine operation is checked to ensure correct operation
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.4 Machine faults requiring repair are identified and reported to designated person, according to enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
	5.5 Repair/adjustment is verified prior to resumption of operations
6. Clean folding/gluing machine at end of run	6.1 Folding unit is cleaned ready for next run 6.2 Gluing unit is disengaged and cleaned ready for next run 6.3 Transport and delivery systems are cleaned ready for next run 6.4 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.4, 2.2, 3.1-3.3, 3.5-3.7, 4.1, 4.2, 5.1, 5.3, 5.4, 6.4	Recognises and interprets text to confirm work requirements from information contained within relevant procedures and specifications
Writing	3.5, 3.6, 4.1, 5.4, 6.4	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.1, 3.5, 3.6, 4.1, 5.2, 5.4	- Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies - Participates effectively in spoken interactions to confirm or clarify
Navigate the world of work	2.1, 2.2, 3.1-3.3, 3.5-3.7, 4.1, 4.2, 5.1-5.4, 6.1-6.4	Recognises and follows all procedures for operation and maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with others	3.1, 3.5, 3.6, 4.1, 5.2, 5.4	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.5, 2.1, 2.2, 3.1-3.4, 3.6, 3.7, 4.1-4.3, 5.1-5.5, 6.4	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans

		Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF309 Produce complex folded and glued cartons	ICPCF3109C Produce complex folded and glued cartons	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF309 Produce complex folded and glued cartons

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- complete THREE crashlock, six-corner and specialty work carton jobs, with different sizes and weights of carton board, using multiple gluing units, according to manufacturer's and job specifications and enterprise procedures on either a Royal 40, a Bobst Media or Bobst Domino.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain work health and safety factors for:
 - setting and/or operating folder/gluer transport and delivery systems
 - adjusting/correcting the machine
 - cleaning the machine
- identify areas of the feeder to monitor to ensure trouble-free operation
- identify parts of the pick-up system to adjust to ensure accurate and continuous feeding
- explain which areas of the delivery system to observe to prevent damage to the finished product
- describe areas to observe continually to ensure smooth, trouble-free operation of the machine
- explain areas of the gluing unit to monitor continuously
- list causes of incorrect folding, and explain how each can be corrected
- identify segments of quality assurance inspected at sample run completion
- describe action to take if adhesive viscosity in gluing unit is too low/high
- explain how application of glue is adjusted

- identify areas of the machine to adjust if:
 - sheets are not neatly entering delivery
 - carton blanks are creasing
 - carton blanks are not entering the machine
- explain checks to correctly shut down the machine
- describe checks to make when preparing finished work for dispatch
- identify areas of the machine to clean regularly, and materials to clean from the machine
- explain how to keep the machine clear of surface rust (condensation)
- identify recommended cleaning agents
- identify production records to keep or write-up, and information to include
- explain quality aspects to consider in a completed folded carton
- list steps to ensure important features of the production control system are followed
- explain how production needs to be altered to meet client requirements
- list items to check against the client sample
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to and use of special purpose tools, equipment and materials used to produce folded and glued cartons.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF311 Prepare for cutting forme and stripper making

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare for making cutting formes and strippers.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for die and stripper making	1.1 Die and stripper making requirements are identified and selected from die drawing or inspection 1.2 Availability of all job related components is checked 1.3 Materials chosen are appropriate for cutting forme design and the machine cutting forme/stripper they are to be used on
2. Prepare materials	2.1 Cutting forme/stripper making materials are assessed and cut to size 2.2 Cutting forme/stripper making materials are correct size for production requirements 2.3 Stripper backing material is correct size for production requirements

ELEMENT	PERFORMANCE CRITERIA
	2.4 Product design is drawn onto cutting forme blank to match cutting forme design 2.5 Drawing is in register on cutting forme blank 2.6 Drawing is in register on stripper backing material
3. Prepare lay down sheet and cutting forme tracing	3.1 Lay down sheet and cutting forme tracing are glued correctly onto cutting forme blank 3.2 Lay down sheet is in register on cutting forme blank 3.3 Cutting forme tracing matches product design
4. Design location of bridges, stripping rule and mounting holes	4.1 Cutting forme maintains required strength 4.2 Waste is cut to suit waste extraction system 4.3 Mounting holes register with holes in cutting forme blank

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.3	Recognises and evaluates text to establish job requirements from information contained within relevant systems
Numeracy	2.1-2.3	Identifies and comprehends relevant mathematical information in familiar diagrams and text
Get the work done	1.1-1.3, 2.1-2.6, 3.1-3.3, 4.1-4.3	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Plans, identifies and assembles resources required to complete tasks - Responds to predictable problems and implements standard or logical solutions - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF311 Prepare for cutting forme and stripper making	ICPCF311C Prepare for cutting forme and stripper making	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF311 Prepare for cutting forme and stripper making

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare materials for TWO cutting formes (one large, one small) to accommodate TWO differing typically used substrates, using all relevant processes according to manufacturer's and job specifications, enterprise procedures and listed performance criteria, within the production timeframe.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety factors for cutting materials
- list names of substrates commonly cut by these cutting formes
- determine the impact of different substrates on forme setting
- determine the size of the stripper backer material
- explain the care to take when drawing design onto blank
- ensure correct registration when drawing design onto blank, and when gluing and laying down the cutting forme tracing onto the cutting forme blank
- list the factors that determine the:
 - thickness of stripping rule
 - position and number of bridges
 - position and number of mounting holes
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to relevant facilities, special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF312 Set cutting forme and strippers

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set and maintain cutting formes and strippers, and proof the forme.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Cut cutting forme wood	1.1 Bridge holes are accurately drilled 1.2 Saw cuts accurately match line drawing on cutting forme blank 1.3 Holes are reinforced and in register with fixing screws 1.4 Knives and creasers are cut and shaped accurately to suit cutting forme
2. Prepare knives, creasers and cutting forme rubbers	2.1 Knives and creasers are set accurately into place on cutting forme blank 2.2 Rubber is located on cutting forme to eject product and waste as required
3. Set stripping material	3.1 Stripping materials are attached securely and accurately to

ELEMENT	PERFORMANCE CRITERIA
	stripper backing material 3.2 Mounting strips are correctly fixed
4. Proof cutting forme	4.1 Sample meets production order specifications 4.2 Cutting forme is adjusted or re-cut if required
5. Maintain cutting forme and stripper	5.1 Correct number is allocated to cutting formes/strippers and recorded as per enterprise procedures 5.2 Cutting forme machine is cleaned according to work health and safety requirements and enterprise procedures 5.3 Problems are accurately described to supervisor or maintenance department 5.4 Status of cutting formes/strippers is reported correctly and without delay to production

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	4.1	Recognises and interprets text and diagrams to establish job requirements from information contained within relevant procedures and specifications
Writing	5.1, 5.4	- Records data according to enterprise procedures - Uses appropriate vocabulary to report on job status
Oral Communication	5.3, 5.4	Speaks clearly using appropriate vocabulary, tone and pace to report job status or faults to supervisors or colleagues
Numeracy	1.2,	Identifies and comprehends relevant mathematical information in familiar diagrams and text
Navigate the world of work	5.2	Takes personal responsibility for adherence to legal/regulatory and safety responsibilities relevant to own work context
Interact with others	5.3, 5.4	Initiates and contributes to a range of formal and informal conversations relevant to role, responding, explaining, clarifying and expanding on ideas and information immediately

Get the work done	1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 3.1, 3.2, 4.1, 4.2	- Sequences and schedules complex activities and monitors implementation - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF312 Set cutting forme and strippers	ICPCF312C Set cutting forme and strippers	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF312 Set cutting forme and strippers

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly prepare TWO cutting formes (one large, one small) to accommodate TWO different, typically used substrates using all relevant processes according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety factors for:
 - setting knives
 - cleaning the machine
- list checks made to correctly position bridge holes
- explain reinforcing bridge holes
- identify checks to ensure saw cuts accurately match the line drawings
- list checks made when cutting and shaping knives and creasers
- list factors that determine the amount of rubber attached to the forme
- list factors that determine positioning of the rubber on the forme
- list important items to consider when setting knives and creasers into position on the forme blank
- list checks required when attaching stripping materials to stripper backing materials and determine how this is done accurately
- explain the purpose of mounting strips
- identify areas to proof to ensure the cutting forme meets production order specifications

- explain the importance of allocating numbers to each forme, and the accepted method of recording forme allocation numbers
- identify areas of the machine that need regular cleaning, materials that need to be cleaned from the machine, and how to keep the machine clear of surface rust (condensation)
- list recommended cleaning agents applicable to the cutting forme machine
- identify how to record and report machine maintenance problems
- identify indicators that the machine is in need of oiling/greasing
- explain the importance of monitoring condition of the forme and stripper, and information to record when reporting the condition status
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to relevant facilities, special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF320 Produce complex converted or finished product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to cover complex die cutting, embossing, folding, collating or fastening.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain delivery systems	1.1 Delivery systems are monitored and adjusted to ensure continuous and efficient operation and avoid damage to finished product 1.2 Substrate is added and removed to and from the process according to job specifications
2. Maintain cutting system	2.1 Knife or die condition is monitored and adjusted to ensure product quality meets the approved sample standard 2.2 Cutting pressures are monitored and adjusted to ensure product quality meets the approved sample standard 2.3 Registration of cutting devices and knives or dies are monitored and adjusted to ensure product quality meets the

ELEMENT	PERFORMANCE CRITERIA
	approved sample standard 2.4 Packing of cutting devices or dies is monitored and adjusted to ensure product quality meets the approved sample standard
3. Maintain complex process	3.1 Registration and squareness of folds are monitored and adjusted to ensure product quality meets the approved sample standard, if relevant 3.2 Collating/inserting process is monitored and adjusted to ensure product quality meets the approved sample standard, if relevant
4. Maintain production process	4.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 4.2 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 4.3 Manual and/or automatic control is used according to job specifications 4.4 Performance is monitored and verified using the process control system according to enterprise procedures 4.5 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 4.6 Process adjustments to eliminate problems are reported according to enterprise procedures 4.7 Faulty performance of equipment is identified and reported according to enterprise procedures 4.8 Waste is sorted according to enterprise procedures
5. Identify and rectify problems or faults	5.1 Product and substrate are monitored and tested to ensure conformance to client requirements 5.2 Problems in converting/finishing machine operation are identified and reported according to enterprise procedures 5.3 Adjustments or corrections are carried out according to specified procedures and manufacturer's specifications 5.4 Converting/finishing machine operation is checked to ensure correct operation
6. Conduct shutdown of production process	6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 6.2 Shutdown is conducted in association with fellow workers and

ELEMENT	PERFORMANCE CRITERIA
	in compliance with WHS requirements 6.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 6.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 6.5 Repair/adjustment is verified prior to resumption of operations
7. Clean converting/finishing machine at end of run	7.1 Cutting devices and knives or dies are cleaned or replaced ready for next run 7.2 Cutting devices are sharpened according to WHS procedures 7.3 All units are disengaged and cleaned ready for next run 7.4 Delivery systems are disengaged and cleaned ready for next run 7.5 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	4.2-4.4, 5.3, 6.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	4.6, 4.7, 5.2, 6.4, 7.5	Enters routine data associated with production processes and enterprise procedures
Oral Communication	4.1, 4.7, 5.2, 6.2, 6.4	- Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies - Participates effectively in spoken interactions to confirm or clarify requirements
Navigate the world of work	2.1-2.4, 3.1, 3.2, 4.1, 4.2, 4.4, 4.6-4.8, 5.2, 5.3, 6.1-6.4, 7.1-7.5	Recognises and follows all procedures for operation, cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with	4.1, 4.7, 5.2, 6.2, 6.4	Cooperates with others as part of familiar routine activities, and contributes to specific activities

others		requiring joint responsibility and accountability Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1, 1.2, 2.1-2.4, 3.1, 3.2, 4.1-4.8, 5.1-5.4, 6.1-6.5, 7.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel delivery system OR - sheet delivery system OR - complex fastening (adhesive/mechanical/sewing) system.
Monitoring and adjusting MUST include EITHER:	- reel stand and rewind section - web control system to ensure correct tension - delivery system - sheeting system OR - feeder - sheet pick-up and transportation - transfer system to ensure correct and continuous sheet handling OR - fastening registration - wire straightening, length, cut off and clinching pressures - adhesion

	• thread tension and stitch quality.
Units MUST include EITHER:	• machine bed OR • glue system OR • laminating machine.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF320 Produce complex converted or finished product	ICPCF320C Produce complex converted or finished product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF320 Produce complex converted or finished product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate all safety devices on the machinery
- correctly produce complex converted or finished product involving complex die cutting, embossing, folding, collating or fastening for TWO different jobs involving different types, sizes and weights of substrate according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

individual must:

- identify work health and safety (WHS) factors for:
 - setting up and/or operating machine transport systems
 - setting up and/or operating machine delivery systems
 - maintaining the cutting process
 - using the folding machine
 - adjusting/correcting the machine, and prior to any required adjustments
 - maintaining or adjusting the operation of the machine
 - using hot melt adhesive
 - cleaning the machine
- identify safety clothing available for use when operating adhesive binders
- explain how to carry out buckle, knife and pharmaceutical folding
- outline the actions required if:
 - the gate fold unit is out of timing
 - the right angle fold is out-of-square

- double sheet feeds occur
- identify areas of the machine to adjust if:
 - the sheet is creasing
 - the sheet is caught in the fold plate
 - the sheet is not entering the machine
 - sheets are not entering delivery neatly
- list and describe common machine faults and how to correct them
- explain why gluing units and delivery systems require careful monitoring
- identify indicators showing replacement of a knife/cutting edge is required
- list checks required when cutting pressure is adjusted, and the points to monitor when maintaining cutting pressures
- list checks made when:
 - sections fail to open on the chain
 - packing cutting devices
 - correcting dull cutting edges on equipment
 - correcting depth of embossing
 - substrate is removed from the machine
- explain the terms:
 - side lay
 - deflector
 - glue line
- determine segments of quality assurance inspected at the completion of the sample run
- determine action if the:
 - viscosity of adhesive in the gluing unit is too low/high
 - gluing unit is out of timing
- explain solutions when:
 - job is out-of-square
 - ink is too wet for production
 - job does not coincide with the sample
 - sheet is creasing
 - sheet is caught in the fold plate
 - sheet is not entering the machine
 - sheet falls out of the machine after folding
 - sheets misfeed during production
 - 'bruising' of the NCR sheets occurs
- determine factors that govern speed the machine operates at
- identify indicators the machine needs lubrication
- explain consequence/s of too much or too little adhesive
- determine factors indicating:
 - the machine need to be adjusted

- the machine need to be slowed down
- when machine speed can be increased
- explain how to adjust position and quantity of adhesive on an adhesive binder/gluer
- explain how to adjust adhesive thickness and pressure on an adhesive binder/gluer
- explain how to achieve more spine milling on an adhesive binder
- explain how to straighten or adjust wire in the wire feed on a wire stitcher
- explain how to increase/decrease dwell time on a high frequency welder
- list checks for shutting down a given machine, and identify the key reasons for the checks
- identify materials to clean from the machine
- list recommended cleaning agents for this machine and how to keep the machine clear of surface rust
- determine quality aspects to monitor during production as well as those to check on the finished product
- list steps to ensure important features of the production control system are followed
- identify items to check against the client sample
- explain required production records and the information to include
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them

For Reel Systems Only

- identify areas of the reel stand to monitor to ensure trouble-free operation
- explain how to adjust the web control system to maintain correct web tension and correct positioning of the web

For Sheet Systems Only

- identify areas of the sheet-fed feeder to monitor to ensure trouble-free operation
- determine parts of the sheet or section pick-up system to adjust to ensure accurate and continuous sheet handling.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to relevant facilities, special purpose tools, machinery, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF321 Set up and produce complex guillotined product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to complete complex guillotining (including knife changing) involving programmable guillotines and/or complex cutting sequences.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked 1.4 Grip and lay edges of sheet are identified
2. Install and replace cutting knives into machine	2.1 Appropriate knives are selected and safely secured to machine 2.2 Dull knives are removed and bolted securely to protective board 2.3 Cutting sticks are replaced when necessary

ELEMENT	PERFORMANCE CRITERIA
3. Set up machine for guillotining	3.1 Guillotine is set up and adjusted according to job specifications 3.2 Clamping pressures are set up and adjusted according to job specifications
4. Conduct sample cut	4.1 Material to be used for sample is organised correctly 4.2 Machine is set up and operated to produce a specified sample according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 4.3 Sample is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 4.4 Results are interpreted to determine adjustment requirements 4.5 Adjustments are carried out according to product and machine specifications
5. Maintain guillotining process	5.1 Knife and cutting stick condition is monitored and adjusted to ensure product quality meets the approved sample standard 5.2 Cutting pressures are monitored and adjusted to ensure product quality meets the approved sample standard 5.3 Registration of knives is monitored and adjusted to ensure product quality meets the approved sample standard
6. Maintain operation of production process	6.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 6.2 Production is maintained according to WHS requirements, manufacturer's specifications and enterprise procedures 6.3 Manual and/or automatic control is used according to job specifications 6.4 Performance is monitored and verified using the process control system according to enterprise procedures 6.5 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 6.6 Process adjustments to eliminate problems are reported according to enterprise procedures 6.7 Faulty performance of equipment is identified and reported according to enterprise procedures 6.8 Waste is sorted according to enterprise procedures
7. Identify and rectify problems and faults	7.1 Problems in guillotining machine operation are identified and reported according to enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
	7.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 7.3 Guillotining machine operation is checked to ensure correct operation
8. Conduct shutdown of production process	8.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 8.2 Shutdown is conducted in association with fellow workers and in compliance WHS requirements 8.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 8.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 8.5 Repair/adjustment is verified prior to resumption of operations
9. Clean guillotining machine at end of run	9.1 Knife and machine bed are cleaned ready for next run 9.2 Cutting machine is disengaged and cleaned ready for next run 9.3 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1, 3.2, 4.2, 4.5, 6.2, 6.3, 8.1, 9.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	6.6, 6.7, 7.1, 8.4	Records information relating to production and machinery problems and completes production reports and other relevant documentation
Oral Communication	6.1, 6.6, 6.7, 8.2, 8.4	- Uses appropriate language to adequately report discrepancies and faults to designated person - Participates effectively in spoken interactions to confirm or clarify requirements

Navigate the world of work	2.1-2.3, 4.2, 4.3, 5.1-5.3, 6.1, 6.2, 6.4, 6.6-6.8, 7.1-7.3, 8.1-8.4, 9.3	- Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures - Understands roles and responsibilities for task and makes basic decisions on work completion parameters - Takes personal responsibility for adherence to regulatory responsibilities relevant to own work context
Interact with others	6.1, 6.6, 6.7, 8.2, 8.4	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.4, 2.1-2.3, 3.1, 3.2, 4.1-4.5, 5.1-5.3, 6.1-6.5, 6.7, 6.8, 7.1-7.3, 8.1-8.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF321 Set up and produce complex guillotined product	ICPCF321C Set up and produce complex guillotined product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF321 Set up and produce complex guillotined product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up (including knife change) and produce THREE complex guillotined products (with three different substrates eg paper, strawboard, plastic, book cloth, and both large and small sheets) using a semi-automated or automated electronic guillotine, and setting a complex cutting program according to manufacturer's and job specifications, enterprise procedures and listed performance criteria
- demonstrate all safety devices on the machine
- demonstrate use of computerised control, monitoring and data entry systems if available and appropriate.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety (WHS) factors for:
 - handling knife blades during the knife change operation
 - setting up and operating the guillotine for a complex cutting job
 - checking and adjusting the machine
 - maintaining the production process
 - shutting down and/or cleaning the machine
- determine information concerning cutting found in the job documentation or production control system, and how to interpret this information to ensure smooth workflow throughout the factory
- explain SIX trade terms that may be used in the documentation for complex cutting or guillotine knife change operations
- determine elements that must be considered when planning a cutting sequence

- identify recommended knife angles for general cutting and the result if the:
 - knife angle is less than 19 degrees
 - knife angle is more than 24 degrees
- explain the use of a double bevel on a guillotine knife
- list factors that indicate a new blade is needed, and the result if a dull blade is used continuously
- explain the difference between a sharp knife and a dull knife, and the information to record when a dull knife is replaced
- explain when to replace a cutting stick, and the result of not replacing the cutting stick regularly
- determine when a knife with a double angle is required
- determine forces acting on a guillotine knife
- list requirements to choose, and adjust the correct clamping pressure for a given job, and explain the result of the clamp pressure not being appropriate for the stock
- identify clamp pressure recommended for:
 - NCR paper
 - 80gsm offset paper
 - 2400um strawboard
- identify the largest and smallest size sheets that can be processed on this machine and the procedures used to complete undersize requirements
- determine how to recognise a:
 - ‘work and turn’ job
 - ‘work and twist’ job
 - ‘work and tumble’ job
 - ‘work and back’ job
- list problems that can occur when activating the automatic knife, and types of jobs unsuitable for automatic cutting
- explain requirements of trimming multi-section books or magazines with bulky spines
- determine machine adjustment parameters and the setting that may need to be altered after checks have been made
- list FIVE methods for identifying a lay and gripper edge if not marked
- identify reporting procedures if the machine malfunctions
- explain treatment/disposal of waste from the guillotine area
- list ways to mark lay and gripper edges on sheets, and the result if the lay and grip edges are not recognised
- determine need to build-up the clamp of a guillotine, and how to ‘pack-up’ the clamp of a guillotine
- identify why:
 - the guillotine knife will not operate when the machine is turned on
 - a book block may be cut out-of-square
 - the program not working after it has been entered into the machine
- identify parts of the guillotine to check if, after a cut, top sheets are:
 - longer than the bottom sheets

- shorter than the bottom sheets
- out-of-square
- creasing along the cut line
- list checks necessary when the clamp plate is removed and the machine adjusted
- explain factors that indicate a need for machine lubrication, and the correct types and methods of lubrication
- determine special operations essential when shutting down the machine
- identify maintenance procedures to keep the machine in good condition and order, and methods to rid the machine of waste
- list recommended cleaning agents to use on the guillotine
- identify quality aspects to consider in a completed cutting job
- list steps to ensure important features of the production control system are followed
- determine items to check against the client sample (including the cutting result) and the steps required if the result does not coincide with the sample produced
- determine areas of the finished product to inspect, and any production alterations required to meet client requirements
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to relevant facilities, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF326 Undertake pre make-ready for die cutting

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare cutting formes (two large and two small) to accommodate different complexities of cutting containing multiple images with extremely tight registration and highly accurate cutting requirements.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Obtain job instructions and locate forme	1.1 Job sheets or instructions are interpreted correctly 1.2 Existing formes are located in storage area using filing system and new formes and associated tooling are collected from holding location
2. Check cutting forme	2.1 Cutting forme/tooling is checked against master sample for accuracy of cut and fold 2.2 Centre line is located and checked to ensure accuracy of positioning/registration on Bobst
3. Position and set up counters	3.1 Cutting plate is located and prepared for counters 3.2 Counters are accurately positioned and set up on cutting plate

ELEMENT	PERFORMANCE CRITERIA
	to ensure registration with cutting forme
4. Conduct sample cut	4.1 Material to be used for sample cut is obtained 4.2 Cutting forme and cutting plate are accurately positioned on machine 4.3 Machine is operated to produce sample according to enterprise procedures
5. Check sample	5.1 Sample is accurately cut and registration of tooling is precise 5.2 Forme or tooling is adjusted if necessary, according to job specifications 5.3 Sample is confirmed as correct by supervisor if required
6. Set up stripping forme and blank separator	6.1 Pins are positioned on stripping forme to ensure accurate removal of waste board 6.2 Blank separator is set up according to job specifications
7. Undertake filing procedure	7.1 Correct identification number is allocated to cutting formes/tooling and strippers, and recorded 7.2 Information is correctly entered into filing system according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 5.2, 6.2, 7.2	Recognises and interprets text to establish job requirements from information in relevant procedures and specifications
Writing	7.1, 7.2	Gathers information from a range of sources to record using headings, instructions and layout to meet needs of audience and purpose of text
Navigate the world of work	4.3, 7.2	Recognises and follows organisational policies and procedures relevant to own role
Get the work	1.1, 1.2, 2.1, 2.2, 3.2,	Plans, identifies and assembles resources required to

done	4.1-4.3, 5.1, 5.2, 6.1, 6.2, 7.2	complete tasks • Implements actions as per plan, making accurate adjustments as necessary • Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF326 Undertake pre make-ready for die cutting	ICPCF326C Undertake pre make-ready for die cutting	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF326 Undertake pre make-ready for die cutting

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare FOUR cutting formes (two large and two small) to accommodate TWO different complexities of cutting (at least one must contain multiple images with extremely tight registration and highly accurate cutting requirements)
- demonstrate accurate attachment of stripper materials
- evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list checks required to correctly position bridge holes
- explain how to reinforce bridge holes
- list checks to perform to ensure saw cuts accurately match line drawings
- list checks when cutting and shaping the knives and creasers
- identify work health and safety factors for setting knives
- identify factors that determine the amount and positioning of rubber attached to the forme
- determine important items to consider when setting knives and creasers into position on the forme blank
- list checks for attaching stripping materials to stripper backing materials
- explain the purpose of mounting strips
- identify areas to proof to ensure cutting forme meets production order specifications
- explain allocation of numbers to each forme
- determine the method of recording forme allocation numbers that is the accepted formula.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to relevant facilities, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF327 Set up machine for complex rotary die cutting or embossing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up a machine for complex rotary die cutting or embossing.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Mount rotary cutting or embossing devices	2.1 Cutting devices or dies are correctly mounted to die 2.2 Cutting devices or dies are registered and proofed on die cylinder 2.3 Appropriate cutting devices or dies are selected and secured to machine according to job specifications

ELEMENT	PERFORMANCE CRITERIA
3. Set up delivery systems	3.1 Delivery systems are set up and adjusted according to job specifications 3.2 Substrate is removed according to job specifications
4. Set up machine for basic rotary cutting	4.1 Rotary cutting devices are set up and adjusted according to job specifications 4.2 Cutting pressures are set up and adjusted according to job specifications 4.3 Counter knives/anvils are set in correct position
5. Set up in-line units	5.1 Minor in-line printing/converting/binding units are set up for basic processes and adjusted according to machine requirements and job specifications 5.2 Assistance is given in set-up of major in-line printing/converting/binding units
6. Conduct sample run	6.1 Material to be used for sample is organised correctly 6.2 Machine is set up and operated to produce a specified sample according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 6.3 Sample is visually inspected and/or tested, or laboratory testing is organised, according to enterprise procedures 6.4 Results are interpreted to determine adjustment requirements 6.5 Adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 4.1, 4.2, 6.5	Recognises and interprets text to establish job requirements from information in relevant procedures and specifications
Oral Communication	5.2	Participates effectively in spoken interactions to confirm or clarify understanding

Navigate the world of work	6.2, 6.3	Recognises and follows legislative requirements and organisational policies and procedures relevant to own role
Interact with others	5.2	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1-1.3, 2.1-2.3, 3.1, 3.2, 4.1-4.3, 5.1, 6.1-6.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Implements actions as per instructions, making slight adjustments if necessary - Plans, identifies and assembles resources required to complete tasks - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel systems OR - sheet systems.
Setting up and adjusting MUST include EITHER:	- unwind and rewind reels - web control system - folder and sheeter OR - feeder and delivery systems - sheet pick-up and transportation systems - transfer systems.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF327 Set up machine for complex rotary die cutting or embossing	ICPCF327C Prepare for cutting forme and stripper making	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF327 Set up machine for complex rotary die cutting or embossing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up machine for EITHER rotary die cutting OR embossing; for either process, set up TWO complex jobs (including in-line processes) with different substrates, sizes and patterns according to manufacturer's and job specifications, enterprise procedures and listed performance criteria, within the production timeframe
- demonstrate all safety devices on the machine.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety factors that must be considered when either:
 - setting up and/or operating sheet transport and delivery systems
 - setting up and adjusting rotary cutting devices
- OR
- setting up reel delivery systems
- determine information concerning rotary die cutting or embossing found in the job documentation or production control system, and interpret this information to ensure smooth workflow throughout the factory
- determine factors to consider when deciding on a cutting system
- explain checks for when cutting devices are mounted on a cylinder
- identify methods used for registering and proofing cutting devices
- explain checks for when cutting devices are attached to the machine
- list criteria that determines selection of particular cutting devices
- list steps to ensure the delivery system operates effectively

- identify important areas or sections of the feeder unit set up
- identify areas of the delivery system to observe to maintain neat delivery of finished work and prevent damage to the finished product
- list necessary checks when substrate is removed from the machine
- list ways the finished product can be secured for despatch
- explain machine pressure and machine cutting depths
- explain adjusting lays for registration, what to check, and when it is done
- identify problems that occur if counter knives/anvils are incorrectly set
- determine the largest/smallest size sheet that can be processed on this machine
- list necessary checks to ensure suitability of in-line process
- determine details of the completed sample to examine to ensure conformance with the client requirements
- list common faults that can occur with the rotary cutting process
- determine factors that indicate a need for replacement of knives/blades/cutting edges
- explain how cutting edges and counter knives (anvils) should be stored to guard against damage and deterioration
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them

For Reel Systems Only

- list adjustments required to the:
 - unwind reel to suit various jobs
 - sheeter during production
 - folder during production
 - rewind wheel during production
- identify important areas to consider during webbing procedures
- determine important areas of the reel delivery system to adjust according to job specifications

For Sheet Systems Only

- list adjustments:
 - required to the sheeter during production
 - that can be made to the machine to facilitate accurate sheet pick-up and transportation.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to relevant facilities, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF328 Produce complex rotary die cut or embossed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce complex rotary die cut or embossed product, maintain operation of machinery and the production process, rectify problems and shut down the equipment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain operation of delivery systems	1.1 Delivery systems are monitored and adjusted to ensure efficient and continuous operation and ensure no damage to finished product 1.2 Substrate is added to and removed from the process according to job specifications
2. Maintain operation of complex rotary die cutting or embossing process	2.1 Knife condition is monitored and adjusted to ensure product quality meets the approved sample standard 2.2 Cutting pressures are monitored and adjusted to ensure product quality meets the approved sample standard 2.3 Registration of knife(s) is monitored and adjusted to ensure

ELEMENT	PERFORMANCE CRITERIA
	quality 2.4 Packing of cutting devices is monitored and adjusted to ensure product quality meets the approved sample standard
3. Maintain production process	3.1 In-line printing/converting/binding/finishing processes are monitored and adjusted to ensure product quality meets the approved sample standard 3.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.3 Production is maintained according to Work Health and Safety (WHS) requirements, manufacturer's specifications and enterprise procedures 3.4 Manual and/or automatic control is used according to job specifications 3.5. Performance is monitored and verified using the process control system according to enterprise procedures 3.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.7 Process adjustments to eliminate problems are reported according to enterprise procedures 3.8 Faulty performance of equipment is identified and reported according to enterprise procedures 3.9 Waste is sorted according to enterprise procedures
4. Identify and rectify rotary cutting machine problems and faults	4.1 Problems in rotary cutting machine are identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 4.3 Cutting rotary machine operation is checked to ensure correct operation
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.4 Machine faults requiring repair are identified and reported to

ELEMENT	PERFORMANCE CRITERIA
	designated person according to enterprise procedures 5.5 Repair/adjustment is verified prior to resumption of operations
6. Clean rotary cutting units at end of run	6.1 Knife and machine bed are cleaned ready for next run 6.2 Cutting devices are sharpened correctly according to WHS requirements and enterprise procedures 6.3 Cutting machine is disengaged and cleaned ready for next run 6.4 In-line printing/converting/binding/finishing units are cleaned ready for next run 6.5 Transportation and delivery systems are disengaged and cleaned ready for next run 6.6 Production records or other documentation are accurately completed, where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	5.1	Recognises and interprets text to establish job requirements from information in procedures and specifications
Writing	3.7, 3.8, 4.1, 5.4, 6.6	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.2, 3.7, 3.8, 4.1, 5.2, 5.4	- Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies - Participates effectively in spoken interactions to confirm or clarify requirements
Navigate the world of work	2.1-2.4, 3.1-3.3, 3.5, 3.7-3.9, 4.1, 4.2, 5.1-5.4, 6.1-6.6	Recognises and follows all procedures for operation and maintenance of equipment, incorporating regulatory and enterprise requirements
Interact with others	3.2, 3.7, 4.8, 4.1, 5.2, 5.4	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations

Get the work done	1.1, 1.2, 2.1-2.4, 3.1-3.9, 4.1-4.3, 5.1-5.5, 6.1-6.6	• Determines priorities and sequences steps involved in clearly defined, familiar tasks • Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans • Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• reel OR • sheet.
Monitoring and adjusting MUST include:	• reel stand and rewind stand • web control system • sheeting section OR • feeder and delivery systems • sheet pick-up and transportation systems • transfer systems.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF328 Produce complex rotary die cut or embossed product	ICPCF328C Produce complex rotary die cut or embossed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF328 Produce complex rotary die cut or embossed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce complex products on EITHER rotary die cutting OR embossing. For either process produce TWO complex jobs (including in-line processes) with different substrates, sizes and patterns according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

All Systems

- identify work health and safety (WHS) factors for:
 - setting up and/or operating machine transport systems
 - setting up and/or operating machine delivery systems
 - maintaining the cutting process
 - problem-solving on the rotary machine cutting process
 - conducting machine shutdown procedures
- identify areas of the machinery that require cleaning at the end of the run
- identify items of importance to consider when maintaining rotary cutting operations
- lists checks to be made:
 - on cutting pressures, cutting registration, packing of cutting area, condition of cutting edges, and the smooth running of the operation
 - cutting accuracy once it has been adjusted
 - when removing substrate from the machine
 - when packing cutting devices

- when waste is removed from the machine and surrounding area for disposal or recycling
- when cutting devices or knives are cleaned, stored or replaced ready for the next run
- when shutting down the machine
- determine indicators that demand replacement of cutting edges
- identify ways to guarantee a clean and precise result
- explain production difficulties expected during production runs and procedure for correcting any machine faults
- identify cleaning agents used to clean the machine
- identify production records to be kept or written up and the information that should be included
- determine quality aspects to consider in a completed rotary cutting job
- list steps to ensure important features of the production control system are followed
- identify production areas that may have to be adjusted to meet client requirements
- identify items to check against the client sample
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them

For Reel Systems Only

- identify areas of the:
 - reel stand to monitor to ensure trouble-free operation
 - web control system to adjust to maintain correct web tension and the correct positioning of the web
 - delivery system to observe to maintain tension and prevent damage to the finished product

For Sheet Systems Only

- identify areas of the sheet-fed feeder to monitor to ensure trouble-free operation
- list parts of the sheet pick-up system to adjust to ensure accurate and continuous sheet handling.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to relevant facilities, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF341 Set up machine for complex sequenced or multiple folding

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up a machine for complex folding.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Set up delivery system	2.1 Delivery systems are set up and adjusted according to job specifications
3. Set up machine for complex sequenced or multiple folding	3.1 Buckle/knife folding units are set up and adjusted according to job specifications 3.2 Folding rollers/belts/rails are set up and adjusted according to

ELEMENT	PERFORMANCE CRITERIA
	job specifications
4. Set up in-line units	4.1 Minor in-line printing/converting/binding units are set up for basic processes and adjusted according to machine requirements and job specifications 4.2 Assistance is given in set-up of major in-line printing/converting/binding units
5. Conduct sample run	5.1 Material to be used for sample is organised correctly 5.2 Machine is set up and operated to produce a specified sample according to work health and safety requirements, manufacturer's specifications and enterprise procedures 5.3 Sample is visually inspected and/or tested, or laboratory testing is organised, according to enterprise procedures 5.4 Results are interpreted to determine adjustment requirements 5.5 Adjustment changes are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1, 3.2, 4.1, 5.2, 5.5	Recognises and interprets text to establish job requirements from information in relevant procedures and specifications
Oral Communication	4.2	Participates effectively in spoken interactions to confirm or clarify requirements
Navigate the world of work	5.1-5.3	Recognises and follows legislative requirements and organisational policies and procedures relevant to own role
Interact with others	4.2	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work	1.2, 1.3, 2.1, 3.1-3.2,	Determines priorities and sequences steps involved in clearly defined, familiar tasks

done	4.1, 4.2, 5.1-5.5	• Implements actions as per instructions, making slight adjustments if necessary • Plans, identifies and assembles resources required to complete tasks • Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• reel OR • sheet.
Setting up and adjusting MUST include EITHER:	• unwind reel • webbing procedures • web control system • splicing/joining reels • folder and sheeter OR • feeder and delivery system • sheet pick up system • transfer system • sheet transfer and control.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF341 Set up machine for complex sequenced or multiple folding	ICPCF341C Set up machine for complex sequenced or multiple folding	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF341 Set up machine for complex sequenced or multiple folding

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up set up THREE multiple sequenced folding jobs (e.g. letter folds, concertina folds) OR gusseting (envelope adjuster) jobs, using different sizes and weights of substrates e.g. 45-110 grams per square meter (gsm) and including use of a gluing unit and/or gate fold unit, according to manufacturer's and job specifications, enterprise procedures and the listed performance criteria
- demonstrate all safety devices on the machine.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

All Systems

- identify work health and safety factors that must be considered when:
 - setting up and/or operating machine transport systems
 - setting folder transportation and delivery systems
 - setting up and/or adjusting the folding unit
 - adjusting machine units
- determine the information concerning folding requirements that would be found in the job documentation or production control system and how this information could be interpreted to ensure smooth workflow throughout the factory
- determine the factors that must be considered when planning a folding sample
- identify the areas that should be monitored to ensure trouble-free operation for either the reel stand or sheet-fed delivery system

- identify areas of the delivery system to observe to maintain neat delivery of finished work and prevent damage to the finished product
- list checks to make when substrate is removed from the machine
- list ways folded sheets can be secured for dispatch
- determine the largest/smallest size sheet that can be processed on the machine
- list ways the machine can be adapted to facilitate smaller/larger stock
- list causes of scratching/scuffing of substrate during transportation
- identify factors that determine machine speed
- explain problems that can be expected if:
 - the machine is running too fast
 - the machine rollers are set too loose
 - there is too much roller pressure
 - the delivery system is not set correctly
- identify factors that determine correct roller pressure for a given job
- list roller pressure checks for correctness
- list steps to ensure correct alignment of in-line processes/units
- list checks when operating the electronic gate fold unit
- explain the use of a gate fold unit
- explain the use of a gluing unit on a job
- determine adhesive used in the gluing unit
- identify adjustments made to the glue line length
- determine segments of quality assurance to inspect at the sample run completion
- explain actions required if the:
 - job is out-of-square
 - ink is too wet for production
 - job does not coincide with sample
- identify items to check against the client sample
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them

For Reel Systems Only

- identify areas to adjust for the web control system to maintain correct web tension and correct web positioning

For Sheet Systems Only

- identify adjustments required in each of the following cases:
 - the sheet is creasing
 - the sheet is caught in the fold plate
 - the sheet is not entering the machine
 - the sheet is not reaching the folding unit
 - the sheet not leaving the folding unit
 - the sheets are smudging/scuffing

- the sheet is turned on the transportation unit
- identify parts of the sheet pick-up system to adjust to ensure accurate and continuous sheet handling
- identify factors that determine accuracy of sheets entering folding rollers
- determine the adjustment to be made if the sheet is out-of-square
- list the reasons for the sheet being out-of-square and explain how each may be corrected.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to relevant facilities, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF342 Produce complex sequenced or multiple folded product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce complex folded product, monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain delivery system	1.1 Delivery systems are monitored and adjusted to ensure continuous and efficient operation 1.2 Substrate is added to the process according to job specifications
2. Maintain production process	2.1 Registration and squareness of fold are monitored and adjusted to ensure product quality meets the approved sample standard 2.2 Basic in-line printing/converting/binding/finishing process(es) are monitored and adjusted to ensure product quality meets the approved sample standard 2.3 Production process is operated in association with fellow

ELEMENT	PERFORMANCE CRITERIA
	workers and according to enterprise procedures and planned daily schedule 2.4 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 2.5 Manual and/or automatic control is used according to job specifications 2.6 Performance is monitored and verified using the process control system according to enterprise procedures 2.7 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 2.8 Process adjustments to eliminate problems are reported according to enterprise procedures 2.9 Faulty performance of equipment is identified and reported according to enterprise procedures 2.10 Waste is sorted according to enterprise procedures
3. Identify and rectify problems and faults	3.1 Problems in folding (sequenced/multiple) machine operation are identified and reported according to enterprise procedures 3.2 Adjustments or corrections are carried out according to specified procedures, and are consistent with operator's skill level 3.3 Folding (sequenced/multiple) machine operation is checked to ensure correct operation 3.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 3.5 Repair/adjustment is verified prior to resumption of operations
4. Conduct shutdown of production process	4.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 4.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 4.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
5. Clean folding (single/continuous) machine at end of run	5.1 Folding units are disengaged and cleaned ready for next run 5.2 In-line printing/converting/binding/finishing units are cleaned ready for next run 5.3 Reel feed and transportation systems are disengaged and cleaned ready for next run

ELEMENT	PERFORMANCE CRITERIA
	5.4 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.4, 2.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.1, 3.4, 5.4	Enters routine data associated with production processes and enterprise procedures
Oral Communication	2.3, 2.8, 2.9, 3.1, 3.4, 4.2	- Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies - Participates effectively in spoken interactions to confirm or clarify requirements
Navigate the world of work	2.1-2.4, 2.6, 2.8-2.10, 3.1, 3.2, 3.4, 4.1-4.3, 5.1-5.4	Recognises and follows all procedures for operation and maintenance of equipment, incorporating regulatory and enterprise requirements
Interact with others	2.3, 2.8, 2.9, 3.1, 3.4, 4.2	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.2, 1.2, 2.1-2.10, 3.1-3.5, 4.1-4.3, 5.4	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST could include EITHER:	• reel OR • sheet.
Monitoring and adjusting MUST include EITHER:	• reel stand • web control systems OR • feeder and delivery systems • sheet pick-up and transport systems • transfer systems.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF342 Produce complex sequenced or multiple folded product	ICPCF342C Produce complex sequenced or multiple folded product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF342 Produce complex sequenced or multiple folded product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- complete TWO jobs (if possible, using different sizes and weights of substrate) with:
 - a single fold to run continuously,
OR
 - a single quire fold on a sheet gather/stitch/fold/trim machine,
OR
 - an automatic web-fed machine to achieve a single fold, according to manufacturer's and job specifications, enterprise procedures and listed performance criteria
- demonstrate use of computerised control, monitoring and data entry systems if available and appropriate.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

All Systems

- identify work health and safety factors for:
 - setting up and/or operating machine transport systems
 - setting up and/or operating machine delivery systems
 - using the folding machine
 - adjusting/correcting the machine
 - cleaning the machine
- list checks to make when substrate is removed from the machine
- list areas of the in-line process to monitor to ensure product quality

- determine causes of out-of-square folding and explain how each can be corrected
- determine segments of quality assurance inspected at sample run completion as well as in a completed folded job
- explain communication to instigate if the:
 - job is out-of-square
 - ink is too wet for production
 - job does not coincide with the sample
- identify important tasks to correctly shut down the machine
- explain requirements to prepare finished work for dispatch
- identify areas of the machine to clean regularly and materials to clean from the machine
- explain requirements to keep the machine clear of surface rust (condensation)
- determine production alterations needed to meet client requirements
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them

Reel Systems Only

- identify areas of the reel stand to monitor to ensure trouble-free operation
- list part(s) of the machine to adjust if the sheet is creasing

Sheet Systems Only

- identify areas of the sheet-fed feeder to monitor to ensure trouble-free operation.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to relevant facilities, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF343 Set up machine for complex collating or inserting (sheet/section/reel)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up a machine for complex collating, gathering or inserting of sheets or sections.

It applies to individuals working in binding and finishing operations, mail houses and newspapers.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Set up delivery systems	2.1 Delivery systems are set up and adjusted according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	2.2 Substrate is added to and removed from the process according to job specifications
3. Set up machine and in-line units	3.1 Collating/inserting system is set up and adjusted according to job specifications 3.2 Minor in-line printing/converting/binding units are set up for basic processes and adjusted according to machine requirements and job specifications 3.3 Assistance is given in set-up of major in-line printing/converting/binding units (NOTE: if entire set-up is completed, refer to appropriate competency standards)
4. Conduct sample run	4.1 Material to be used for sample is organised correctly 4.2 Machine is set up and operated to produce a specified sample according to work health and safety requirements, manufacturer's specifications and enterprise procedures 4.3 Sample is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 4.4 Results are interpreted to determine adjustment requirements 4.5 Adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1, 3.2, 4.2, 4.5	Recognises and interprets texts to establish job requirements from information contained within relevant procedures and specifications
Oral communication		Participates effectively in spoken interactions to confirm or clarify requirements
Navigate the world of work	4.2, 4.3	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with	3.3	Cooperates with others as part of familiar routine activities, and contributes to specific activities

others		requiring joint responsibility and accountability
Get the work done	1.1-1.3, 2.1-2.6, 3.1, 3.2, 4.1-4.5	• Determines priorities and sequences steps involved in clearly defined, familiar tasks • Implements actions as per instructions, making slight adjustments if necessary • Plans, identifies and assembles resources required to complete tasks • Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• reel OR • sheet.
Setting up and adjusting MUST include EITHER:	• unwind and rewind reels • web control systems • splicing/joining reels OR • feeder and delivery systems • sheet/section/reel pick-up and transportation systems • transfer systems.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF343 Set up machine for complex collating or inserting (sheet/section/reel)	ICPCF343C Set up machine for complex collating or inserting (sheet/section/reel)	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF343 Set up machine for complex collating or inserting (sheet/section/reel)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up machines for complex collating for a minimum of FOUR products, including in-line processes on FOUR occasions, (if possible) including:
 - two sheet jobs, each using different sizes and weights of substrate
 - two section jobs, with and without lip/lap, according to manufacturer's and job specifications, enterprise procedures and listed performance criteria
- demonstrate all safety devices on the machine.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

All Systems

- identify work health and safety (WHS) factors for:
 - setting up and/or operating machine transport systems
 - when the machine is operating
 - adjusting machine units and before readjusting the machine
- determine important information concerning collating found in the job documentation or production control system and how to interpret this information to ensure smooth workflow throughout the factory
- explain elements to consider when planning a collated sample
- identify areas of the machine to adjust to allow for 42gsm stock
- list ways the machine can be adapted to facilitate smaller/larger stock
- identify factors that govern speed the machine operates at
- determine indicators that show the machine needs lubrication

- list steps to ensure correct alignment of in-line processes/units
- determine adjustments to keep units correctly positioned
- determine requirements for an acceptable collating result
- explain the cause of sheets creasing in the machine delivery
- determine adjustments to the machine to alleviate bruising of no carbon required (NCR) paper
- identify items to check against the client sample
- identify when the machine needs to be adjusted
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in these documents

For Reel Systems Only

- identify areas of the reel stand to monitor to ensure trouble-free operation
- identify area of the web control system to adjust to maintain correct web tension
- identify area of the web control system to adjust to maintain correct positioning of the web

For Sheet Systems Only

- list important factors to consider when setting up the feeder and double/misfeed sheet calliper system
- identify requirements to ensure smooth transportation of sheets or sections to and through the machine
- name different types of sheet/section delivery systems
- determine largest/smallest size sheet that can be processed on this machine
- determine the largest/smallest sheet/section size to be run on the machine.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to facilities, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF344 Produce complex collated or inserted product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce a complex collated or inserted sheet, section or reel product, to monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain delivery systems	1.1 Delivery systems are monitored and adjusted to ensure efficient and continuous operation 1.2 Substrate is added to and removed from the process according to job specifications
2. Maintain production process	2.1 Collating or inserting process is monitored and adjusted to ensure product quality meets the approved sample standard 2.2 In-line printing/converting/binding/finishing processes are monitored and adjusted to ensure product quality meets the approved sample standard 2.3 Production process is operated in association with fellow

ELEMENT	PERFORMANCE CRITERIA
	workers and according to enterprise procedures and planned daily schedule 2.4 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 2.5 Manual and/or automatic control is used according to job specifications 2.6 Performance is monitored and verified using the process control system according to enterprise procedures 2.7 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 2.8 Waste is sorted according to enterprise procedures
3. Identify and rectify problems and faults	3.1 Problems in collating or inserting (sheet/section/reel) machine are identified and reported according to enterprise procedures 3.2 Adjustments or corrections are carried out according to specified procedures, and are consistent with operator's skill level 3.3 Collating or inserting (sheet/section/reel) machine operation is checked to ensure correct operation 3.4 Process adjustments to eliminate problems are reported according to enterprise procedures 3.5 Faulty performance of equipment is identified and reported according to enterprise procedures
4. Conduct shutdown of production process	4.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 4.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 4.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 4.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 4.5 Repair/adjustment is verified prior to resumption of operations
5. Clean collating or inserting (sheet/section/reel) machine at end of run	5.1 Collating or inserting machine is cleaned ready for next run 5.2 In-line printing/converting/binding/finishing units are cleaned ready for next run 5.3 Reel feed transportation and delivery systems are disengaged and cleaned ready for next run

ELEMENT	PERFORMANCE CRITERIA
	5.4 Sheet feed, transportation and delivery systems are disengaged and cleaned ready for next run 5.5 Production records or other documentation are accurately completed, where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.4, 2.5, 4.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.1, 3.4, 3.5, 4.4, 5.5	Enters routine data associated with production processes and enterprise procedures
Oral Communication	2.3, 3.1, 3.4, 3.5, 4.2, 4.4	- Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies - Participates effectively in spoken interactions to confirm or clarify requirements
Navigate the world of work	2.1-2.4, 2.6, 2.8, 3.1, 3.2, 3.4, 3.5, 4.1-4.4, 5.1-5.5	Recognises and follows all procedures for operation, cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with others	2.3, 3.1, 3.4, 3.5, 4.2, 4.4	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	2.1-2.8, 3.1-3.3, 4.1-4.5, 5.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel transportation OR - sheet transportation.
Monitoring and adjusting MUST include EITHER:	- cleaning collating or inserting (sheet/section/reel) machine - web control system OR - feeder - sheet pick-up and transportation system - transfer system.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF344 Produce complex collated or inserted product	ICPCF344C Produce complex collated or inserted (sheet/section/reel) product	Updated to meet Standards for Training Packages Minor title change	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF344 Produce complex collated or inserted product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- operate machines for complex collating for a minimum of FOUR products, including in-line processes on FOUR occasions, (if possible) including:
 - two sheet jobs, each using different sizes and weights of substrate
 - two section jobs, with and without lip/lap, to produce a complex collated products according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety (WHS) factors for:
 - when the machine is operating
 - before readjusting the machine
 - when cleaning materials from the machine
- explain factors that govern speed the machine operates at
- determine indicators that show the machine needs lubrication
- identify when the machine needs adjustment
- list areas to check when sections are failing to open on the chain
- list checks to do when correctly shutting down the machine
- determine areas of the machine that need regular cleaning and list recommended cleaning agents
- explain how to keep the machine clear of surface rust (condensation)
- determine production records to be kept or written up, and the information to include

- list steps to ensure important features of the production control system are followed
- determine requirements for an acceptable collating result
- explain the cause of sheets creasing in the machine delivery
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them

For Sheet Systems Only

- explain causes of sheets misfeeding during production and how to correct creasing of sheets and prevent double sheet feeds
- determine adjustment to make to prevent bruising of no carbon required sheets.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to relevant facilities, equipment and materials used to produce a collated or inserted product.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF361 Set up machine for complex adhesive, mechanical or sewn fastening

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up a machine for complex adhesive, mechanical or sewn fastening. Some equipment may also involve cutting, trimming, folding and/or gathering (collating), which may be assessed at the same time.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Set up sheet/section system	2.1 Feeder and delivery systems are set up and adjusted according to job specifications 2.2 Sheet/section pick-up and transportation system is set up and adjusted according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	2.3 Transfer systems are set up and adjusted according to job specifications 2.4 Substrate is removed from the process according to job specifications 2.5 Sheet/section transfer and control system is set up and adjusted according to job specifications
3. Set up machine and in-line units	3.1 Fastening system is set up and adjusted according to job specifications 3.2 Minor in-line printing/converting/binding units are set up for basic processes and adjusted according to machine requirements and job specifications 3.3 Assistance is given in set-up of major in-line printing/converting/binding units
4. Conduct sample run	4.1 Material to be used for sample is organised correctly 4.2 Machine is set up and operated to produce a specified sample according to work health and safety requirements, manufacturer's specifications and enterprise procedures 4.3 Sample is visually inspected and/or tested, or laboratory testing is organised, according to enterprise procedures 4.4 Results are interpreted to determine adjustment requirements 4.5 Adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1-2.5, 3.1, 3.2, 4.2, 4.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Navigate the world of work	4.2, 4.3	Recognises and follows protocols and meets expectations associated with own role

Interact with others	3.3	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1-1.3, 2.1-2.5, 3.1-3.3, 4.1-4.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Implements actions as per instructions making slight adjustments if necessary - Plans, identifies and assembles resources required to complete tasks - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF361 Set up machine for complex adhesive, mechanical or sewn fastening	ICPCF361C Set up machine for complex adhesive, mechanical or sewn fastening	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF361 Set up machine for complex adhesive, mechanical or sewn fastening

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up machines for one complex process of adhesive, thermal, mechanical or section sewing
- set up (including replacing adhesive, thread, wire) TWO complex jobs using different sizes and weights of substrate according to manufacturer's and job specifications, enterprise procedures and listed performance criteria
- demonstrate all safety devices on the machine.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety factors for:
 - setting up the machine
 - setting up transportation systems
 - setting up fastening equipment on the machine
 - working with hot melt adhesives
 - readjusting the machine
- determine information concerning binding requirements found in the job documentation or production control system and how this information is interpreted to ensure smooth workflow throughout the factory
- explain elements to consider when planning a collated sample
- explain special delivery problems associated with adhesive machines and how to overcome these problems
- identify different section feeding systems

- explain how to monitor delivery systems present on the various machines
- explain ways completed work can be secured for dispatch
- determine the largest/smallest size sheet that can be processed on each machine
- list how the machine can be adapted to facilitate smaller/larger stock
- describe a job-correct binding technique
- describe methods of adhesive metering present on the machine
- explain the care required to ensure a neat and clean adhesive binding job
- list outcomes if sewing is not completed in the right position
- determine parts of the wire stitcher to adjust to process books of different thicknesses
- identify position of wire stitches on the book
- explain the difference between a staple and a wire stitch
- determine the appropriate wire calliper for a particular job
- list how the machine can be adapted to facilitate smaller/larger stock
- identify in-line units available for binding processes
- determine circumstances in which the machine needs to adjustment
- determine quality aspects to consider in the completed binding job
- list steps to ensure important features of the production control system are addressed
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to relevant facilities, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF362 Produce complex adhesive, mechanical or sewn fastened product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce complex adhesive, mechanical or sewn fastened product, to monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

Some equipment may also involve cutting, trimming, folding and/or gathering (collating), which may be assessed at the same time.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain operation of sheet/section transportation system	1.1 Feeder is monitored and adjusted to ensure continuous and efficient feeding to machine 1.2 Sheet/section pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation 1.3 Sheet/section transfer systems are monitored and adjusted to

ELEMENT	PERFORMANCE CRITERIA
	ensure correct and continuous sheet handling and efficient operation 1.4 Substrate is added to the process according to job specifications
2. Maintain operation of sheet/section delivery system	2.1 Delivery system is monitored and adjusted to ensure quality and efficient product delivery 2.2 Wire straightness, length, cut-off and clinching pressures are monitored and adjusted to ensure product quality meets the approved sample standard 2.3 Adhesion is monitored and adjusted to ensure product quality meets the approved sample standard 2.4 Thread tension and stitch quality are monitored and adjusted to ensure product quality meets the approved sample standard
3. Maintain production process	3.1 In-line printing/converting/binding/finishing processes are monitored and adjusted to ensure product quality meets the approved sample standard 3.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.3 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 3.4 Manual and/or automatic control is used according to job specifications 3.5 Performance is monitored and verified using the process control system according to enterprise procedures 3.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.7 Waste is sorted according to enterprise procedures
4. Identify and rectify problems and faults	4.1 Problems in sewing fastening machine are identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to specified procedures, and are consistent with operator's skill level 4.3 Sewing fastening machine operation is checked to ensure correct operation 4.4 Process adjustments to eliminate problems are reported according to enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
	4.5 Faulty performance of equipment is identified and reported according to enterprise procedures
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 5.5 Repair/adjustment is verified prior to resumption of operations
6. Clean adhesive/mechanical/sewing fastening machine at end of run	6.1 Sewing unit is disengaged and cleaned ready for next run 6.2 Mechanical fastening unit is disengaged and cleaned ready for next run 6.3 Glue system is washed ready for next run and liquid waste is disposed of according to regulatory requirements and enterprise procedures 6.4 In-line printing/converting/binding/finishing units are cleaned ready for next run 6.5 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run 6.6 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.4, 3.3, 3.4, 5.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	4.1, 4.4, 4.5, 6.6	Enters routine data associated with production processes and enterprise procedures

Oral Communication	3.2, 4.1, 4.4, 4.5, 5.2, 5.4	- Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies - Participates effectively in spoken interactions to confirm or clarify requirements
Navigate the world of work	2.2-2.4, 3.1-3.3, 3.5, 3.7, 4.1, 4.2, 4.4, 4.5, 5.1-5.4, 6.1-6.5	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with others	3.2, 4.1, 4.4, 4.5, 5.2, 5.4	- Cooperates with others as part of familiar, routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.3, 2.1-2.4, 3.1-3.7, 4.1-4.5, 5.1-5.5, 6.6	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF362 Produce complex adhesive, mechanical or sewn fastened product	ICPCF362C Produce complex adhesive, mechanical or sewn fastened product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF362 Produce complex adhesive, mechanical or sewn fastened product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce a complex fastened product in either adhesive, mechanical or section sewing
- produce TWO complex jobs using different sizes and weights of substrate according to manufacturer's and job specifications, enterprise procedures and listed performance criteria
- demonstrate adjustment of adhesive application on an adhesive binder
- demonstrate adjustment of wire length on a wire stitcher
- demonstrate straightening the wire in the wire feed on a wire stitcher.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety (WHS) factors for:
 - operating sheet-fed transportation and delivery systems
 - maintaining or adjusting operation of the machine
 - using hot melt adhesive
 - cleaning hot melt from the machine
- identify areas of the sheet-fed feeder to monitor to ensure trouble-free operation
- identify parts of the sheet pick-up system to adjust to ensure accurate and continuous sheet feeding
- identify areas of the delivery system to observe to maintain tension
- identify areas of the delivery system to observe to prevent damage to the finished product
- list checks to make when substrate is removed from the machine
- list safety clothing available for use when operating adhesive binders

- determine speed of production
- determine sectors to observe to guarantee the production process is trouble-free and continuous
- identify areas of the in-line process to monitor to ensure product quality
- explain circumstances that require the machine:
 - to be adjusted
 - to be slowed down
 - to be sped up
- determine how to achieve more spine milling on an adhesive binder
- explain how to increase/decrease dwell time on a high frequency welder
- explain how to increase/decrease current on a high frequency welder
- list checks to make when shutting down a given machine
- describe the main reasons for a thorough shutdown of operations
- identify areas of the machine that need regular cleaning, materials to be cleaned from the machine, and how to ensure the machine is kept clear of surface rust (condensation)
- list recommended cleaning agents
- identify production records to be kept or written up and the information that should be included in them
- determine quality aspects to be considered in a completed:
 - adhesive bound job
 - high frequency welded job
 - wire stitched job
- list steps to ensure important features of the production control system are followed
- determine production alterations required to meet client requirements
- list items to check against the client sample
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to facilities, equipment and materials used to produce adhesive, mechanical or sewn fastened products.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF369 Set up and produce hand-made box

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up and produce a hand-made box. It applies to the binding and finishing sector, not the carton sector of the industry.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine dimensions and style of box	1.1 Options for style and cost are discussed with client 1.2 Dimensions of article to be contained are determined through measurement and/or job specifications 1.3 Final job specifications are determined and confirmed with client
2. Select materials	2.1 Board weight, covering and lining materials are selected according to job specifications 2.2 Grain direction is determined if relevant
3. Cut board, cover material and lining to size	3.1 Board, cover material and lining are cut to correct size 3.2 Board is scored to appropriate depth if necessary

ELEMENT	PERFORMANCE CRITERIA
	3.3 Waste is removed if applicable 3.4 Lids are fitted, if necessary, to allow for the thickness of covering material
4. Assemble box	4.1 Box is assembled according to job specifications
5. Attach covering material and lining	5.1 Corners are cut correctly according to job specifications 5.2 Covering material and lining are fixed with adequate and smooth adhesion 5.3 Material is rubbed smoothly into corners of box
6. Press box if necessary	6.1 Block for pressing is made up as required 6.2 Even pressure is applied to box sections
7. Decorate or furnish box if required	7.1 Appropriate decorating techniques are used where relevant 7.2 Appropriate furnishings (clasps, hinges) are attached if required

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.3, 2.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Oral Communication	1.1, 1.3	- Uses language and non-verbal features appropriate to audience, to exchange ideas and suggest options - Listens and asks questions to confirm or clarify requirements
Numeracy	1.2, 3.1, 3.2, 3.4, 5.1	Selects from and uses a variety of mathematical and problem-solving strategies in a range of familiar contexts
Interact with others	1.1, 1.3	Understands what to communicate, with whom and how, in routine work situations
Get the work	1.2, 2.1, 2.2, 3.1, 3.4, 5.1-5.3, 6.1, 6.2,	Determines priorities and sequences steps involved in clearly defined, familiar tasks

done	7.1, 7.2	• Implements actions as per instructions making slight adjustments if necessary • Plans, identifies and assembles resources required to complete tasks

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Box assembly MUST include EITHER:	• Folding and scoring corners with straight folds at correct angles and secured with reinforcing material if necessary OR • Gluing and butt join with walls set at correct angles to base and flush joints made with adequate adhesion.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF369 Set up and produce hand-made box	ICPCF369C Set up and produce hand-made box	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF369 Set up and produce hand-made box

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce TWO boxes in different styles and materials, at least one of which must have a lid, according to manufacturer's and job specifications, enterprise procedures, listed performance criteria, and within the production timeframe.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety (factors for making boxes
- identify necessary board calliper for a box
- determine the maximum calliper for a folded box
- explain how to make inconspicuous corner reinforcements
- identify appropriate covering material and style
- determine style of box that is appropriate in line with client requirements
- list recommended allowances in a book box
- in slip cases, list techniques to reduce scuffing of a book cover
- determine how to reduce corner bulk when using heavyweight board
- list techniques used when cutting turn-ins for a rounded spine
- explain need to cover the edge of a board before attaching the main covering
- explain consequences of adhesives either too thick or too thin
- explain the effect open time of an adhesive has on the covering process
- list criteria used to evaluate a finished box and ensure a clean finished job.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to facilities, equipment and materials used to produce a hand-made box.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF371 Decorate paper

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up and use a range of paper and edge decorating techniques including marbling, gilding, gaufering, staining, sprinkling, spraying, burnishing and paste paper.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Surface to be decorated is prepared 1.2 Edges are trimmed, scraped and sanded as appropriate to the technique being used 1.3 Appropriate size, mordant or glair is prepared and applied
2. Carry out marbling	2.1 Bath is prepared with gum or water as appropriate to technique being used 2.2 Equipment is selected and set up according to job and manufacturer's specifications 2.3 Colours are mixed to correct consistency for required spread 2.4 Books are tied up if edges are to be marbled

ELEMENT	PERFORMANCE CRITERIA
	2.5 Bath is prepared according to job specifications 2.6 Substrate is correctly dipped and removed, then rinsed and dried
3. Gild edges with leaf	3.1 Book is loaded into laying press 3.2 Red bole or black lead (graphite) is correctly applied and treated 3.3 Gold and glair are correctly applied and burnished
4. Gild edges mechanically	4.1 Substrate is loaded into press 4.2 Substrate is prepared according to technical requirements 4.3 Gilding machine is set up with appropriate pressure, heat and dwell time 4.4 Gilding foil is applied to substrate using correct technique 4.5 Appropriate additives are used if foil fails to take
5. Carry out gauffering	5.1 Design to be transferred is drawn up using correct technique 5.2 Tools are selected and prepared 5.3 Book is locked into laying press 5.4 Impressions are made ensuring even result
6. Carry out staining or sprinkling or spraying	6.1 Books or papers are positioned and clamped or weighted 6.2 Covering colour is prepared according to job specifications 6.3 Colour is applied with sponge, spray gun, roller or sprinkling brush as appropriate, ensuring even application and adequate time to dry
7. Apply graphite	7.1 Book is locked into laying press 7.2 Graphite powder is applied using the correct technique 7.3 Edges are burnished to required effect
8. Carry out burnishing	8.1 Book is locked into laying press 8.2 Bloodstone or agate tools are selected as appropriate 8.3 Beeswax is supplied in fine film or worked through waxed paper 8.4 Edges of book are burnished using appropriate pressure
9. Make paste paper	9.1 Paste is prepared to correct consistency and colour 9.2 Required patterns are created using brushes, combs, dies or

ELEMENT	PERFORMANCE CRITERIA
	pulling off

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.2, 2.5, 6.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Get the work done	1.1-1.3, 2.1-2.6, 3.2, 3.3, 4.2-4.5, 5.1, 5.2, 5.4, 6.1-6.3, 7.2, 7.3, 8.2-8.4, 9.1, 9.2	- Plans, identifies and assembles resources required to complete tasks - Makes basic decisions in relation to choice of techniques, equipment and materials

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF371 Decorate paper	ICPCF371C Decorate paper	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF371 Decorate paper

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly decorate paper using any THREE processes OR using TWO processes of which one must be marbling or gilding. For each process, produce TWO jobs (if possible, using different sizes, styles and substrates), according to manufacturer's and job specifications, enterprise procedures and listed performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety factors for using various methods of paper decoration
- identify size/mordant/glair used for a particular process and its appropriate strength
- explain FIVE methods of application, and describe where each is used
- determine surface preparation timing before treatment
- explain different gums used in the bath, and the correct consistency required of the bath
- determine likely causes of blank spots on the substrate and explain importance of keeping the substrate free of dust
- explain how to control of spread of colour
- describe temperature affect on the marbling process
- identify reasons for gold not sticking
- explain the repair of a break in a gilt edge
- describe methods of picking up gold leaf for edge gilding
- determine the technique used for gilding in the round
- explain the difference of antique gilding from a solid gilt edge
- determine use of red bole or black lead with the gold
- describe the technique used to obtain an even impression
- explain the consequence of inappropriate pressure

- list ways to ensure an even finish
- explain how to minimise colour absorption in absorbent stocks
- confirm methods to prevent colour appearing on an adjacent edge
- list how correct consistency of graphite/paste mixture is determined
- list ways an even coating is ensured
- identify the most common fault with burnished edges
- list steps to ensure a smooth result
- list ways correct consistency for paste is determined
- list ways colour fastness is ensured
- explain techniques to produce different patterns or effects
- identify manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to facilities, equipment and materials used to decorate paper.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF381 Set up machine for complex laminating

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up a machine for a range of complex laminating processes including laminating reel to reel, sheet to reel and reel to sheet.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage
2. Set up reel transportation system	2.1 Unwind reel is set up and adjusted according to job specifications 2.2 Webbing procedures are carried out 2.3 Web control system is set up and adjusted according to job specifications 2.4 Reels are spliced/joined according to job specifications 2.5 Rewind reel is set up and adjusted according to job

ELEMENT	PERFORMANCE CRITERIA
	specifications 2.6 Sheeter is set up and adjusted according to job specifications
3. Set up machine for complex laminating	3.1 Application system cylinder is set up and adjusted according to job specifications 3.2 Adhesive application system is set up and adjusted according to job specifications 3.3 Binding pressures are set up and adjusted according to job specifications 3.4 Drying system is set up and adjusted according to job specifications
4. Set up in-line unit(s)	4.1 Minor in-line printing/converting/binding unit(s) are set up for basic process(es) and adjusted according to machine requirements and job specifications 4.2 Assistance is given in set-up of major in-line printing/converting/binding unit(s)
5. Conduct sample run	5.1 Raw material to be used for sample is organised correctly 5.2 Machine is set up and operated to produce a specified sample according to work health and safety requirements, manufacturer's specifications and enterprise procedures 5.3 Sample is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 5.4 Results are interpreted to determine adjustment requirements 5.5 Adjustment changes are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 2.3-2.6, 3.1-3.4, 4.1, 5.2, 5.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications

Navigate the world of work	5.2, 5.3	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	4.2	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.2, 2.1-2.6, 3.1-3.4, 4.1, 5.1-5.5	- Plans and organises familiar tasks - Implements actions as per instructions, making adjustments if necessary - Plans, identifies and assembles resources required to complete tasks - Analyses results to decide on adjustments needed to achieve required outcomes - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF381 Set up machine for complex laminating	ICPCF381C Set up machine for complex laminating	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF381 Set up machine for complex laminating

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate all safety devices on the machine
- correctly set up machine for TWO moisture, chemical and extrusion laminating processes. For each process set up a laminating machine (2 or more ply) to complete TWO jobs on different substrates, of different sizes (large/small formats including one in-line process) while demonstrating splicing techniques in minimum time according to manufacturer's and job specifications, enterprise procedures and listed performance criteria (at least one machine used must be fully automated).

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- determine information concerning laminating requirements found in the job documentation or production control system, and how this information can be interpreted to ensure smooth workflow throughout the factory
- describe elements to consider when planning a laminating sample
- identify work health and safety factors for:
 - setting up the laminating machine
 - adjusting the machine, and prior to any readjustments
 - setting the drying system
- identify webbing procedures commonly used in the transportation area
- identify areas to consider when setting up the web control system
- identify problem areas likely to occur when setting up the sheeter
- explain methods of splicing a web on the laminating process
- list checks to make when setting up (and adjusting) the application system cylinder

- list checks to make when setting up (and adjusting) the adhesive application system
- identify factors that determine setting of the binding pressures
- identify the largest/smallest size sheet that can be processed on this machine
- explain how to adapt the machine to facilitate smaller/larger stock
- determine in-line units available for the laminating process
- describe circumstances that require machine adjustment
- explain quality aspects to consider in a completed laminating job, and items to check against the client sample
- list steps to ensure important features of the production control system are addressed
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to facilities, equipment and materials used for laminating.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF382 Produce complex laminated product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce complex laminated product, to monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain operation of reel transportation system on web-fed machine	1.1 Reel stand is monitored and adjusted to ensure efficient continuous operation 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation 1.3 Substrate is added to the process according to job specifications
2. Maintain operation of reel delivery system on web-fed machine	2.1 Reel rewind section is monitored and adjusted to maintain correct tension and to ensure no marks, blemishes or damage to finished product 2.2 Substrate is removed from the process according to job

ELEMENT	PERFORMANCE CRITERIA
	specifications 2.3 Sheeting section is monitored and adjusted to ensure quality and efficient product delivery
3. Maintain complex laminating process	3.1 Registration of laminating is monitored and adjusted to ensure product quality meets the approved sample standard 3.2 Pressures are monitored and adjusted to ensure product quality meets the approved sample standard 3.3 Adhesion is monitored and adjusted to ensure product quality meets the approved sample standard
4. Maintain production processes	4.1 In-line printing/coating/converting/binding/finishing process(es) are monitored and adjusted to ensure product quality meets the approved sample standard 4.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 4.3 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 4.4 Manual and/or automatic control is used according to job specifications 4.5 Performance is monitored and verified using the process control system according to enterprise procedures 4.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 4.7 Process adjustments to eliminate problems are reported according to enterprise procedures 4.8 Faulty performance of equipment is identified and reported according to enterprise procedures 4.9 Waste is sorted according to enterprise procedures
5. Identify and rectify machine operating problem	5.1 Problems in laminating machine are identified and reported according to enterprise procedures 5.2 Adjustments or corrections are carried out according to specified procedures, and are consistent with operator's skill level 5.3 Laminating machine operation is checked to ensure correct operation
6. Conduct shutdown of	6.1 Correct shutdown sequence is followed according to

ELEMENT	PERFORMANCE CRITERIA
production process	manufacturer's specifications and enterprise procedures 6.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 6.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 6.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 6.5 Repair/adjustment is verified prior to resumption of operations
7. Clean laminating machine at end of run	7.1 Laminating machine is disengaged and cleaned ready for next run 7.2 Adhesive system is washed ready for next run and liquid waste is disposed of according to regulatory requirements and enterprise procedures 7.3 In-line printing/coating/converting/binding/finishing units are cleaned ready for next run 7.4 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run 7.5 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 2.2, 4.3, 4.4, 6.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	4.7, 4.8, 5.1, 6.4, 7.5	Enters routine data associated with production processes and enterprise procedures
Oral Communication	4.2, 4.7, 4.8, 5.1, 6.2, 6.4	- Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies - Participates effectively in spoken interactions to confirm or clarify requirements

Navigate the world of work	3.1-3.3, 4.1-4.3, 4.5, 4.7-4.9, 5.1, 5.2, 6.1-6.4, 7.1-7.5	Recognises and follows all procedures for operation and maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with others	4.2, 4.7, 4.8, 5.1, 6.2, 6.4	- Cooperates with others as part of familiar, routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.3, 2.1-2.3, 3.1-3.3, 4.1-4.9, 5.1-5.3, 6.1-6.5, 7.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF382 Produce complex laminated product	ICPCF382C Produce complex laminated product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF382 Produce complex laminated product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly produce a complex laminated product using any TWO of moisture, chemical and extrusion laminating processes. For each process, operate a laminating machine (2 or more ply) to complete TWO jobs on different substrates and of different sizes (large/small formats including one in-line process), while demonstrating splicing techniques in minimum time according to manufacturer's and job specifications, enterprise procedures and listed performance criteria (at least one machine used must be fully automated).

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain work health and safety factors for:
 - operating web machine transport and delivery systems
 - maintaining the laminating process
 - maintaining complex in-line processes
 - shutting down and cleaning the machine
- determine areas of the:
 - reel stand to monitor to ensure trouble-free operation
 - web control system to adjust to maintain correct web tension and positioning of the web
 - delivery system to observe to maintain tension
 - delivery system to observe to prevent damage to the finished product
 - in-line processes to monitor to ensure a quality product

- machine that need regular cleaning
- explain the process for correct and continuous feeding and delivery of substrate
- list checks to make when substrate is removed from the machine
- determine ways:
 - registration of laminating is assured
 - adjustment of the machine is achieved
 - pressure can be adjusted during production
- determine areas of production to monitor to ensure trouble-free operation
- identify laminating problems that may occur during operation of the machine
- explain adjustments or correction procedures to ensure accurate operation of the process and to meet client requirements
- list checks to make when correctly shutting down the machine
- identify materials to clean from the machine
- explain requirements to keep the machine clear of surface rust (condensation)
- list recommended cleaning agents, and materials to be cleaned from the machine
- identify production records to be kept or written up, and the information to include
- determine quality aspects to consider in a completed laminated job
- list steps to ensure important features of the production control system are followed
- explain items to check against the client sample
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to facilities, equipment and materials used to produce a laminated product.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF391 Use electronic monitoring systems (converting and finishing)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to use electronic monitoring systems for glue lines used in the container and carton sector of the industry, and for gatherers and folders used in the binding and finishing sector.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Set up electronic monitoring system	1.1 Parameters are set according to job type and specifications and enterprise procedures 1.2 Monitoring system is positioned according to job type and specifications 1.3 Ejection system is positioned according to job type and specifications, where relevant 1.4 Marking system is positioned according to job type and specifications, where relevant 1.5 'Learn' function is started to identify sheets and signatures, where relevant

ELEMENT	PERFORMANCE CRITERIA
2. Run job and monitor production	2.1 Glue line registration and glue application is monitored to ensure product conforms to job specifications 2.2 Machine is adjusted if the number of rejects exceeds specified limits 2.3 Reasons for stoppages are identified and corrected 2.4 Initial set-up parameters are monitored and reviewed to ensure smooth production of quality product
3. Review production data	3.1 Production rejects are monitored and causes identified 3.2 Overall data is reviewed at the end of the product run 3.3 Information on production documentation is recorded as required

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.4, 2.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.3	Enters routine data associated with production processes according to organisational requirements
Navigate the world of work	1.1, 2.4	Recognises and follows all procedures for operation of equipment, incorporating regulatory requirements and enterprise procedures
Get the work done	1.1-1.5, 2.1-2.4, 3.1, 3.2	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Applies analytical processes to identify causes of production problems - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF391 Use electronic monitoring systems (converting and finishing)	ICPCF391C Use electronic monitoring systems (converting and finishing)	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF391 Use electronic monitoring systems (converting and finishing)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up and use electronic monitoring systems for glue lines, gatherers and folders for TWO different jobs (preferably of different sizes and substrates), according to manufacturer's and job specifications, enterprise procedures and listed performance criteria
- demonstrate an ability to retrieve information from the electronic system.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain work health and safety factors for setting up and operating electronic monitoring systems
- explain importance of distance between cartons on the machine for production and for the operation of the electronic monitoring system, as well as checking the ejector (or marker) for correct operation
- explain different carton types and substrates, and the effect on the amount and position of glue required for different carton types
- describe the result of too much or too little glue, and explain the correction process
- describe the result of an incorrectly positioned glue line and explain the process to adjust the position with respect to the length of the glue flap
- determine what machine faults are registered on the EMS
- list parts of the folding/gluing system that cause the monitoring system to reject product
- list ways of ensuring the EMS is ejecting/marking only faulty cartons
- identify parts of the machine to adjust if reject cartons are not correctly identified and culled

- list faults likely to trigger the signature or sheet monitoring system
- identify the cause of common faults and how can they be avoided and corrected
- explain quality principles behind the use of electronic monitoring
- explain work procedures to implement to minimise faults
- identify production records to be kept or written up, and the information to be included
- list steps to ensure important features of the EMS are followed
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to facilities, equipment and materials used with electronic monitoring systems.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF392 Produce product on window gluer

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce a range of different size jobs on the window gluer.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain operation of transportation system	1.1 Feeder is monitored and adjusted to ensure continuous and efficient feeding of cartons to the machine 1.2 Carton pick-up and transport system is monitored and adjusted to ensure accurate continuous carton handling and efficient operation 1.3 Transfer systems are monitored and adjusted to ensure correct and continuous carton handling and efficient operation
2. Maintain operation of processes	2.1 Delivery is monitored and adjusted to ensure quality and efficient carton delivery 2.2 Registration of gluing is monitored and adjusted to ensure product quality meets the approved sample standard

ELEMENT	PERFORMANCE CRITERIA
	2.3 Adhesion is monitored and adjusted to ensure product quality meets the approved sample standard
3. Maintain basic rotary cutting process	3.1 Cutting edges and knife condition are monitored and adjusted to ensure product quality meets the approved sample standard 3.2 Cutting pressures are monitored and adjusted to ensure product quality meets the approved sample standard
4. Maintain production process	4.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 4.2 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 4.3 Performance is monitored and verified using the process control system according to enterprise procedures 4.4 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 4.5 Process adjustments to eliminate problems are reported according to enterprise procedures 4.6 Faulty performance of equipment is identified and reported according to enterprise procedures 4.7 Waste is sorted according to procedures
5. Identify and rectify problems	5.1 Problems in window gluing machine operation are identified and reported according to enterprise procedures 5.2 Adjustments or corrections are carried out according to enterprise procedures 5.3 Problems in film cutting and application operation are identified and rectified according to enterprise procedures
6. Conduct shutdown of production process	6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 6.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 6.3 Glue system is washed ready for next run and liquid waste is disposed of according to regulatory requirements and enterprise procedures 6.4 Cutting devices are checked and sharpened if needed 6.5 Waste cartons are removed from operating area and recycled or disposed of, where required, according to regulatory requirements

ELEMENT	PERFORMANCE CRITERIA
	and enterprise procedures 6.6 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 6.7 Repair/adjustment is verified prior to resumption of operations 6.8 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	4.2, 6.1	- Recognises text within job specifications and follows written instructions - Ensures accuracy of information according to written instructions
Writing	4.5, 4.6, 6.6, 6.8	Records information related to outcomes of job according to organisational requirements
Oral Communication	4.1, 4.5, 4.6, 5.1, 6.2, 6.6	- Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies - Participates effectively in spoken interactions to confirm or clarify requirements
Navigate the world of work	2.1-2.3, 3.1, 3.2, 4.1-4.3, 4.5-4.7, 5.1-5.3, 6.1-6.3, 6.5, 6.6, 6.8	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	4.1, 4.5, 4.6, 5.1, 6.2	- Follows accepted practices and protocols for reporting issues to supervisors - Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1-1.3, 2.1-2.3, 3.1, 3.3, 4.1-4.4, 4.6, 4.7, 5.1-5.3, 6.1-6.8	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing

		contingency plans Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF392 Produce product on window gluer	ICPCF392C Produce product on window gluer	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF392 Produce product on window gluer

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- complete different size jobs on the window gluer, including 1, 2 and 3 cycle operate and dual-feed, according to job specifications, listed performance criteria and within the production timeframe.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain work health and safety factors for:
 - setting up and/or operating machine delivery systems
 - using the window facer machine
 - adjusting/correcting the machine
- identify areas of the:
 - feeder to monitor to ensure trouble-free operation
 - machine to continuously observe to ensure smooth, trouble-free operation
 - gluing and film cutting process to monitor to ensure product quality
- explain adjustment of the glue application to ensure product quality
- determine segments of quality assurance inspected at the completion of the sample run, and in a completed job to meet client requirements
- explain communication to instigate if the job does not coincide with the sample
- list part(s) of the machine to adjust if window film is cut/slit incorrectly
- explain factors that cause poor glue adhesion on cartons
- list key tasks to correctly shut down the machine
- explain ways finished work is prepared for the next process

- identify areas of the machine that need regular cleaning, and materials to clean from the machine.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to relevant facilities, equipment and materials used to produce a range of different size jobs on the window gluer.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF393 Set up machine for envelope manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up a machine to cut and add patches during the manufacture of envelopes.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Calibrate and adjust settings	1.1 All details required for the job are checked and confirmed against job specifications 1.2 Correct materials are checked and available for the job 1.3 Adhesives are selected that are appropriate for the substrate, application process and machine 1.4 Work area is made safe and prepared for production according to safety requirements 1.5 Window cutting and patch unit settings are set according to job specifications 1.6 Measurement settings are checked thoroughly against job specifications before production is commenced

ELEMENT	PERFORMANCE CRITERIA
	1.7 Window position and size are set to meet requirements to ensure the machine runs efficiently and safely 1.8 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards 1.9 Process is monitored to maintain quality and identify opportunities for improvement
2. Confirm quality	2.1 A sample is produced and checked for conformance with quality standards, and adjustments made if required 2.2 Efficiency, quality and output rate of production run are monitored for problems, and any deficiencies resolved 2.3 Any machine faults are reported to appropriate responsible person 2.4 Locations of all emergency shutdown buttons and triggers are known

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.5, 1.6	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	2.3	Records information related to outcomes of job according to organisational requirements
Oral Communication	2.3	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Navigate the world of work	1.4, 1.7, 1.8, 2.1, 2.4	Complies with legislative requirements and follows organisational policies and procedures relevant to own role, particularly with respect to workplace safety and emergency procedures
Interact with others	2.3	Follows accepted practices and protocols for reporting issues to supervisors
Get the work	1.1, 1.2, 1.4, 1.5,	Determines priorities and sequences steps involved in clearly defined, routine tasks

done	1.8, 1.9, 2.1, 2.2	• Implements actions as per instructions, monitoring results and making adjustments if necessary • Plans, identifies and assembles resources required to complete tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF393 Set up machine for envelope manufacture	ICPCF393C Set up machine for envelope manufacture	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF393 Set up machine for envelope manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up window cutting and patching units and produce a clean window cut with correct gum position, even level patch size and position, according to job specifications, enterprise procedures and performance criteria, and within the production timeframe
- demonstrate all safety devices on the machine.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe correct procedures for set-up according to health and safety and workplace requirements
- explain factors that determine selection of materials and adhesives
- explain enterprise procedures for quality standards, reporting faults and emergencies
- identify principles of envelope manufacture and setting window cutting and patching units
- list common faults associated with window cutting and patching.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to relevant facilities and envelope manufacturing equipment with window cutting and patching units.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF395 Set up and operate folder gluer machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up and operate a folder gluer machine with minimum downtime or wastage.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Set up and adjust units	1.1 All details required for the job are checked and confirmed against job specifications 1.2 Correct materials are checked and available for the job 1.3 Adhesives appropriate for the substrate, application process and machine are selected 1.4 Work area is made safe and ready for production according to safety requirements 1.5 Folding guides and pressing plates are set to required dimensions for the job 1.6 Feeder, folding part, gluer, stacker, belts, vacuums and glue applicators are clean, clear and ready for use

ELEMENT	PERFORMANCE CRITERIA
	1.7 Settings are checked against job specifications before production commences
2. Monitor throughput	2.1 Machine is run at speed required to produce a quality product 2.2 Machine is jogged to ensure folds and glue are in correct position 2.3 Guide positions are monitored to ensure adhesive is applied evenly and in correct position 2.4 Paper moisture is monitored and correct moisture levels are maintained 2.5 Blank spacing is controlled and product spacing and flow are maintained for efficient operation 2.6 Folds are correctly placed and the product stacks correctly 2.7 Glues dry at correct rates for the substrate
3. Confirm quality of output	3.1 A sample from the machine is selected and checked to ensure it conforms to required quality standards 3.2 Adjustments are made when standards are not met 3.3 Each process is monitored and minor adjustments are made during production, if required 3.4 Samples are continuously monitored for defects, and defects are removed 3.5 Efficiency, quality and output rate of production run are monitored for problems, and any deficiencies resolved 3.6 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards 3.7 Locations of all emergency shutdown buttons and triggers are known

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.7	Recognises and interprets text to establish job requirements from information contained within relevant

		procedures and specifications
Navigate the world of work	1.6, 3.1, 3.6, 3.7	Complies with legislative requirements and follows organisational policies and procedures relevant to own role, particularly with respect to workplace safety and emergency procedures
Get the work done	1.1-1.5, 1.7, 2.1, 2.2, 2.4, 2.5, 3.1-3.6	- Determines priorities and sequences steps involved in clearly defined, routine tasks - Plans, identifies and assembles resources required to complete tasks - Implements actions as per instructions, monitoring results and making adjustments if necessary - Responds to predictable problems and implements standard or logical solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF395 Set up and operate folder gluer machine	ICPCF395C Set up and operate folder gluer machine	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF395 Set up and operate folder gluer machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up and operate a folder gluer machine according to job specifications, performance criteria, and within the production timeframe with minimum downtime or wastage.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list common faults associated with folder gluer machines, the causes, and corrective measures
- describe correct procedures for set-up according to health and safety and workplace requirements
- explain types of adhesive used and why they are chosen.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to a folder gluer machine and other special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF396 Set up in-line scoring, folding and gluing machine for envelope manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up in-line scoring, folding and gluing machines used in the manufacture of envelopes.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Set up and adjust units	1.1 All details required for job are checked and confirmed against job specifications 1.2 Correct materials are checked and made available for the job 1.3 Adhesives appropriate for the substrate, application process, and machine are selected 1.4 Work area is made safe and ready for production according to safety requirements 1.5 Blades are sharp and fitted as necessary, with units calibrated according to job specifications 1.6 Settings are checked against job specifications before

ELEMENT	PERFORMANCE CRITERIA
	production is commenced 1.7 Adhesives are positioned correctly and applied evenly
2. Confirm quality of output	2.1 A sample from the machine is selected and checked to ensure it conforms to required quality standards 2.2 Adjustments are made when standards are not met 2.3 Each in-line process is monitored and minor adjustments made during production, as required 2.4 Samples are continuously monitored for defects, and removed where relevant 2.5 Efficiency, quality and output rate of the production run are monitored for problems, and any deficiencies resolved 2.6 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards 2.7 Locations of all emergency shutdown buttons and triggers are known

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.5, 1.6	Recognises and evaluates text to establish job requirements from information contained within relevant systems
Navigate the world of work	1.4, 2.1, 2.6, 2.7	Complies with legislative requirements and follows organisational policies and procedures relevant to own role, particularly with respect to workplace safety and emergency procedures
Get the work done	1.1-1.7, 2.1-2.6	- Takes responsibility for planning, organising and completing tasks according to organisational requirements - Plans, identifies and assembles resources required to complete tasks - Implements actions as per instructions, monitoring results and making adjustments if necessary - Responds to predictable problems and implements

		standard or logical solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF396 Set up in-line scoring, folding and gluing machine for envelope manufacture	ICPCF396C Set up in-line scoring, folding and gluing machine for envelope manufacture	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF396 Set up in-line scoring, folding and gluing machine for envelope manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up machinery and produce scoring, folding and gumming that meets job specifications for envelope dimensions, envelope squareness, flap dimensions, throat size, gum position, gum level and gum evenness according to job specifications, performance criteria, and within the production timeframe.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list common faults associated with folder gluer machines, the causes, and corrective measures
- explain correct set-up procedures to meet work health and safety requirements and enterprise requirements
- describe different types of adhesives used
- describe the process used to check quality.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to an in-line scoring, folding and gluing machine used in the manufacture of envelopes.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF398 Set up in-line bottom making machine for sack or bag manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up in-line bottom making machines for the manufacture of sacks or bags with minimum downtime.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPCBF298	Run and monitor sack and bag machines

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Set up and adjust units	1.1 Job specifications are obtained and read, and tools and transfer segments are available for set up 1.2 Draw rollers and nip rollers and transfer segments are positioned correctly and pressures calibrated with timing set 1.3 Gears are changed and correctly set up

ELEMENT	PERFORMANCE CRITERIA
	1.4 Knife assembly for guillotining and serration measurements are set, and accurate timing assigned 1.5 Pre-creaser blades are positioned in relation to one another and angular timing fixed 1.6 Centre grippers are correct in size, pressures and positioning 1.7 Vacuum holes are correctly positioned, and opening cylinder is set up and timed 1.8 Bottom forming guides and bottom paste unit are set up 1.9 Bottom closing and patch units are calibrated 1.10 Delivery chute and bag counter are prepared and ready
2. Set up in-line units	2.1 Correct perforation unit or perforation impression roller is set up 2.2 Pick-up rollers are installed and pressure and time are fixed 2.3 Tucking position, timing and depth are correctly set 2.4 Glue patch applicator or glue impression roller is set up according to job specifications 2.5 Press roller is positioned and pressured, and timing is programmed 2.6 Doctor blades and hot melt unit are set up 2.7 Timing between all units is checked for conformance with job specifications 2.8 Gears are changed according to job specifications 2.9 Settings and tensions of the raw material unwind and brake assembly are correct according to job specifications
3. Check availability of materials	3.1 Cut tubes are available and stacked ready 3.2 Adhesives are appropriate for the substrate, application process and machine 3.3 Correct procedures for control of materials are followed
4. Check set up	4.1 Work area is safe and ready for production according to safety requirements 4.2 All details required for the job are checked again and confirmed against job specifications 4.3 Settings are checked against specifications before production is commenced 4.4 Machine is stepped to ensure scores and folds are in correct

ELEMENT	PERFORMANCE CRITERIA
	position, and paper tension is corrected/adjusted

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.4, 2.7-2.9, 3.3, 4.2, 4.3	Recognises and interprets information in specifications to establish or confirm job requirements
Numeracy	1.7	Recognises and compares familiar basic metric measurements and quantities
Navigate the world of work	3.3, 4.1	Complies with health and safety requirements and follows organisational policies and procedures relevant to own role
Get the work done	1.1-1.7, 1.10, 2.1-2.9, 3.1-3.3, 4.1-4.4	- Takes responsibility for planning, organising and completing tasks according to organisational requirements - Plans, identifies and assembles resources required to complete tasks - Makes routine decisions about appropriate equipment and materials by referring to job instructions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF398 Set up in-line bottom making machine for sack or bag manufacture	ICPCF398C Set up in-line bottom making machine for sack or bag manufacture	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF398 Set up in-line bottom making machine for sack or bag manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up in-line bottom making machines for the manufacture of sacks or bags in accordance with job specifications, performance criteria, and with minimum downtime.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list common faults associated with folder gluer machines, the causes, and methods to correct them
- explain correct set-up procedures to meet work health and safety and enterprise requirements
- explain the procedure for blade setup.
-

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to scoring, folding, and gluing machinery used in the manufacture of sacks and bags.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF399 Set up in-line tube making machine for sack or bag manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up in-line tube making machines for the manufacture of sacks or bags with minimum downtime.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPCBF298	Run and monitor sack and bag machines

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Set up and adjust units	1.1 Job specifications are obtained and read and tools are available for set up 1.2 Draw rollers are positioned correctly and pressures calibrated 1.3 Gears are changed and correctly set up 1.4 Knife assembly for guillotining and serration measurements

ELEMENT	PERFORMANCE CRITERIA
	are set and accurate timing assigned 1.5 Nip roller position, timing and pressures are set 1.6 Pre-creaser blades are positioned in relation to one another, and angular timing fixed 1.7 Centre grippers are correct in size, pressures and positioning 1.8 Vacuum holes are correctly positioned and timed
2. Prepare materials for manufacturing process	2.1 Substrate reels are positioned in correct unwind direction and in correct order, and web position, tension and web aligner are set up 2.2 Reels are loaded according to work health and safety requirements, manufacturer's specifications and enterprise procedures 2.3 Adhesives are appropriate for the substrate, application process and machine 2.4 Correct procedures for control of materials are followed
3. Check set up	3.1 Work area is safe and ready for production according to safety requirements 3.2 All details required for the job are checked again and confirmed against job specifications 3.3 Settings are checked against specifications before production starts 3.4 Machine is stepped to ensure scores and folds are in correct position and paper tension is corrected/adjusted

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.2, 3.2, 3.3	Recognises and interprets information in specifications to establish or confirm job requirements
Numeracy	1.7	Recognises and compares familiar basic metric measurements and quantities

Navigate the world of work	2.2, 2.4, 3.1	Complies with health and safety requirements and follows organisational policies and procedures relevant to own role
Get the work done	1.1-1.6, 2.1-2.3, 3.1-3.4	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Plans, identifies and assembles resources required to complete tasks - Makes routine decisions about appropriate equipment and materials by referring to job instructions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF399 Set up in-line tube making machine for sack or bag manufacture	ICPCF399C Set up in-line tube making machine for sack or bag manufacture	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF399 Set up in-line tube making machine for sack or bag manufacture

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up in-line tube making machines for the manufacture of sacks or bags in accordance with job specifications and performance criteria, and with minimum downtime.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list common faults associated with folder gluer machines, the causes and corrective measures
- determine requirements to ensure centre grippers are correct in size and positioning
- explain adjustment requirements for blades and guillotine.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to:

- relevant facilities, equipment and materials
- in-line scoring, folding, and gluing machinery used in manufacture of sacks and bags.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF406 Set up and load in-line smart card machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the performance outcomes, skills and knowledge required to set up, adjust and load an in-line smart card machine in preparation for production.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Set and adjust sections of machine	1.1 All details required for the job are checked and confirmed according to job specifications 1.2 Correct materials are checked and available for the job 1.3 All light sensors and proximity sensors are operating 1.4 Mills are set to right cavity depth for chips 1.5 Tape indexer and die are cleaned and chip registration is correct 1.6 Implanting module is set up and registered and adhesives are available and dispenser is clean and ready 1.7 Machine and in-line components are initialised

ELEMENT	PERFORMANCE CRITERIA
2. Confirm computer settings	2.1 Encoder settings are correct and conform to job specifications 2.2 Tester settings are correct and conform to job specifications 2.3 Setting on the computer that controls entire machine is correctly set
3. Set up printer unit	3.1 Print head is set up and adjusted according to job specifications 3.2 Ink and solvent levels are checked and refilled if necessary 3.3 Settings are selected according to job specifications 3.4 Drying is checked as sufficient to key ink to the substrate 3.5 Printer is set up according to work health and safety (WHS) guidelines
4. Load machine	4.1 Substrate is prepared according to job specifications 4.2 Substrate is positioned correctly to the machine 4.3 Faulty material is visually identified and removed according to WHS requirements and enterprise procedures 4.4 Cards are loaded according to WHS requirements and manufacturer's specifications and enterprise procedures 4.5 Settings are checked according to job specifications before production starts 4.6 Work area is safe and ready for production according to safety requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 2.2, 4.1, 4.4, 4.5	Recognises and interprets text to confirm work requirements from information contained within relevant specifications and standards
Numeracy	1.4	Uses mathematical processes to determine correct settings for job
Navigate the world of	3.5, 4.3, 4.4, 4.6	Recognises and follows organisational and regulatory requirements associated with own role

work		
Get the work done	1.1-1.7, 2.1-2.3, 3.1-3.5, 4.1-4.6	• Determines priorities and sequences steps involved in familiar tasks • Implements actions as per instructions, making slight adjustments if necessary • Plans, identifies and assembles resources required to complete tasks • Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF406 Set up and load in-line smart card machine	ICPCF406C Set up and load in-line smart card machine	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF406 Set up and load in-line smart card machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up and adjust an in-line smart card machine and load it in preparation for production in accordance with job specifications and listed performance criteria
- demonstrate all safety devices on the machine.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe production quality requirements
- explain waste disposal procedures for faulty material and procedures for correct handling of material
- explain important features of the smart card printing and encoding machine
- explain principles of printing and ink usage.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to:

- special purpose tools
- smart card printing and encoding machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF407 Operate a smart card machine and pack product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to operate a smart card machine, monitor production for problems, correctly pack product and clear the machine of materials and wastage.

It applies to individuals who have some responsibility for preparation, monitoring and operation of machinery and equipment, maintaining production and quality of output.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Monitor production process	1.1 All details required for the job are checked and confirmed against job specifications 1.2 Supply of materials throughout run is maintained 1.3 Machine is run at optimum speed for maintaining quality outputs 1.4 Samples from the machine are selected and checked to ensure they conform to job specifications

ELEMENT	PERFORMANCE CRITERIA
	1.5 Machines are adjusted to maintain quality of outputs
2. Maintain quality	2.1 Correct procedures for removal of waste are followed according to enterprise procedures 2.2 Samples are continuously monitored for defects, and defects are removed 2.3 Efficiency, quality and output rate of production run are monitored for problems and any deficiencies resolved 2.4 Milled cavities are checked to ensure right cavity depth for the chips 2.5 Die cuts are correct and meet quality standards 2.6 Correct amount of glue is applied by the dispensing station 2.7 Chips are correctly inserted into the cavity by the implanting module 2.8 Print quality meets standards in the job specifications or sample
3. Code and check chips	3.1 Encoder settings are correct and conform to job specifications 3.2 Tester settings are correct and conform to job specifications 3.3 Details of any cards needing to be remade are entered into computer console
4. Monitor printer unit	4.1 Ink and solvent levels are monitored and filled when required and stock levels are recorded according to enterprise procedures 4.2 Quality of inkjet is monitored to ensure it conforms to job specifications 4.3 Chemicals are handled according to work health and safety (WHS) requirements 4.4 Drying is checked as sufficient to key ink to the substrate
5. Identify problems	5.1 Faults that affect quality of the cards are identified and rectified 5.2 Problems that reduce rate of output are identified and fixed 5.3 Faults that affect efficient operation of equipment are identified and deleted
6. Unload and pack cards	6.1 Cards are unloaded according to WHS requirements, manufacturer's specifications and enterprise procedures 6.2 Reconciliation and final quality check are documented 6.3 Cards are prepared (stacked, wrapped and labelled) for next

ELEMENT	PERFORMANCE CRITERIA
	process according to manufacturer's specifications and enterprise procedures 6.4 Wastage is recorded and disposed of according to enterprise procedures
7. Shut down machine	7.1 Dispensing needle is moved to the safety position and solvent is checked to ensure needle coverage 7.2 Inkjet is cleaned and shutdown according to manufacturer's specifications 7.3 Encoding computer is shut down correctly to ensure no loss of data 7.4 Milling vacuum is emptied and cleaned 7.5 Machine and work area are cleaned according to enterprise procedures 7.6 Air supply is turned off 7.7 Waste chemicals are handled and disposed of according to WHS requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.4, 2.8, 3.1, 3.2, 4.2	- Recognises and interprets text to confirm work requirements from information in specifications and organisational documents - Checks settings on equipment to confirm accuracy
Writing	4.1, 6.2-6.4	Completes records and labels using correct format and language
Numeracy	4.1	Uses basic mathematical formulae to calculate stock and wastage levels
Navigate the world of work	2.1, 4.1, 4.3, 6.1, 6.3, 6.4, 7.5, 7.7	Recognises and follows organisational and regulatory requirements associated with own role
Get the work	1.1-1.5, 2.1-2.8,	Takes responsibility for planning, organising and implementing tasks monitoring output and making

done	3.1-3.3, 5.1-5.3, 6.1-6.4, 7.1-7.7	adjustments if necessary • Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts • Plans, identifies and assembles resources required to complete tasks • Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF407 Operate a smart card machine and pack product	ICPCF407C Operate a smart card machine and pack product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF407 Operate a smart card machine and pack product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- operate a smart card machine and produce cards for TWO different jobs according to job specifications and within the production timeframe
- demonstrate all safety devices on the smart card printing and encoding machine.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

Evidence of the ability to:

- describe operation of the card printing unit
- describe operation of the card encoding unit
- identify production quality requirements
- describe waste disposal procedures
- describe correct material handling procedures
- list principles of printing and ink usage.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to:

- smart card printing and encoding machine
- special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF410 Set up machine for complex carton folding and gluing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up and adjust a machine for complex carton folding and gluing to maintain the production process.

It applies to individuals who have limited responsibility for preparation of materials and equipment in accordance with job specifications and procedures, and ensuring quality of output.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Read and interpret job requirements from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage
2. Set up carton blank transportation system	2.1 Feeder is set up and adjusted according to job specifications 2.2 Carton blank pick-up and transportation system is set up and

ELEMENT	PERFORMANCE CRITERIA
	adjusted according to job specifications 2.3 Transfer systems are set up and adjusted according to job specifications
3. Set up machine for complex carton folding/gluing	3.1 Folding units are set up and adjusted according to job specifications 3.2 Folding rollers/belts/rails are set up and adjusted according to job specifications 3.3 Gluing system is set up and adjusted according to job specifications using glue wheel and/or multiple glue heads
4. Set up carton delivery system	4.1 Delivery is set up and adjusted according to job specifications 4.2 Substrate is removed from process according to job specifications 4.3 Carton transfer and control system is set up and adjusted according to job specifications
5. Conduct sample run	5.1 Material to be used for sample is organised correctly 5.2 Machine is set up and operated according to work health and safety requirements, manufacturer's specifications and enterprise procedures to produce a specified sample 5.3 Sample is visually inspected and/or tested for accuracy of folds, fibre tear, opening force, and fluff and glue placement according to enterprise procedures
6. Readjust settings	6.1 Results are interpreted to determine adjustment requirements 6.2 Adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1-2.3, 3.1-3.3, 4.1-4.3, 5.2, 6.2	Recognises and interprets text to confirm work requirements from information contained in specifications, organisational procedures and control

		systems
Numeracy	1.1, 3.1, 4.3	Interprets and comprehends mathematical information in job documentation or control system
Navigate the world of work	5.2, 5.3	Recognises and follows organisational and regulatory requirements associated with own role
Get the work done	1.1, 1.2, 2.1-2.3, 3.1-3.3, 4.1-4.3, 5.1-5.3, 6.1, 6.2	- Sequences and schedules steps required to complete tasks, monitors implementation and makes adjustments as necessary - Uses analytical processes to interpret relevant information and decide on adjustments needed to achieve required outcomes - Plans, identifies and assembles resources required to complete tasks - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF410 Set up machine for complex carton folding and gluing	ICPCF410C Set up machine for complex carton folding and gluing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF410 Set up machine for complex carton folding and gluing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up at least THREE crash lock, six-corner and specialty work carton jobs using different carton sizes and weights, which include use of multiple gluing units, according to manufacturer's and job specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Documentation

- identify information concerning folding requirements found in the job documentation or production control system, and how it is interpreted to ensure smooth workflow throughout the factory
- list factors to consider when planning a folding sample

Sheet transportation and delivery systems

- explain work health and safety (WHS) factors for setting folder transportation and delivery systems
- identify areas of the carton blank transportation system to monitor to ensure trouble-free operation
- list parts of the carton blank pick-up system to adjust to ensure accurate and continuous sheet handling
- identify areas of the delivery system to observe to maintain neat delivery of finished work and to prevent damage to the finished product
- explain checks required when substrate is removed from the machine

Machine setting for complex folding and gluing

- explain WHS factors for setting and/or adjusting the folding unit
- identify the largest/smallest size carton blank that can be processed on this machine
- describe ways the machine can be adapted to facilitate smaller/larger stock
- identify accuracy of a carton blank entering folding rollers
- describe causes of scratching/scuffing of substrate during transportation
- identify machine speed variations
- describe problems that can be expected if:
 - the machine is running too fast
 - the machine rollers are set too loose
 - there is too much roller pressure
 - the delivery system is not set correctly
- identify how correct roller pressure is determined for a given job
- describe how roller pressures checks are made
- describe required adjustments if the carton blank is out-of-square
- list reasons for the sheet being out-of-square
- describe adjustment required to eliminate smudging/scuffing on carton blanks
- describe adjustment required if the sheet will not leave the folding unit
- In-line processes
- list necessary steps to set up gluing units
- describe how a neat and clean gluing job is achieved
- identify adhesive used in the gluing unit and how length of the glue line is adjusted

Checking and adjustment

- identify causes of out-of-square folding and how they are rectified
- list segments of quality assurance inspected at sample run completion
- identify areas of the machine to adjust if carton blank is creasing
- identify areas of the machine to adjust if carton blank is not entering the machine
- explain items to check against client sample

Information sources

- identify machine manuals and safety documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to:

- Royal 40, Bobst Media or Bobst Domino machine, which includes multiple gluing units
- relevant materials and equipment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF425 Set up machine for complex flat-bed die cutting or embossing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up and adjust machinery to produce complex flat-bed die cutting or embossing.

It applies to individuals working in a printing environment, performing tasks specific to cartons and corrugating that involve set-up of machinery operations and conducting sample runs.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Prepare flat-bed die	2.1 Appropriate cutting devices or dies are selected and secured to

ELEMENT	PERFORMANCE CRITERIA
cutting or embossing devices	machine according to job specifications 2.2 Cutting devices or dies are registered and proofed according to job specifications 2.3 Cutting devices or dies are correctly mounted
3. Set up delivery systems	3.1 Delivery systems are set up and adjusted according to job specifications 3.2 Substrate is removed from process according to job specifications
4. Set up machine for complex flat-bed die cutting or embossing	4.1 Flat-bed cutting devices are set up and adjusted according to job specifications 4.2 Cutting pressures are set up and adjusted according to job specifications 4.3 Machine lays are set to correct position to register
5. Set up in-line units	5.1 Minor in-line printing/converting/binding units are set up for basic processes and adjusted according to machine requirements and job specifications 5.2 Assistance is given in set-up of major in-line printing/converting/binding units
6. Conduct sample run	6.1 Material to be used for sample is organised correctly 6.2 Machine is set up and operated to produce a specified sample according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 6.3 Sample is visually inspected and/or tested, or laboratory testing is organised, according to enterprise procedures 6.4 Results are interpreted to determine adjustment requirements 6.5 Adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description

Reading	1.1, 2.1, 2.2, 4.1, 4.2, 5.1, 6.2, 6.3, 6.5	Recognises and interprets text to confirm work requirements from information contained in specifications, organisational procedures and control systems
Oral Communication	5.2	Participates effectively in spoken interactions to confirm or clarify understanding
Numeracy	1.1	Estimates, accurately measures and calculates quantities, including areas and volumes, using relevant routine formulae
Navigate the world of work	6.2, 6.3	Recognises and follows explicit and implicit protocols and meets expectations associated with own role
Interact with others	6.2	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1-1.3, 2.1-2.3, 3.1, 3.2, 4.1-4.3, 5.1, 6.1-6.5	- Determines priorities and sequences steps involved in clearly defined tasks - Implements actions as per instructions, making slight adjustments if necessary - Plans, identifies and assembles resources required to complete complex tasks

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel OR - sheet.
Setting up and adjusting MUST include EITHER:	- unwind and rewind reels - webbing procedures - web control system - splicing/joining reels OR - feeder and delivery system - sheet pick-up and transportation system - transfer and control system - folder and sheeter.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF425 Set up machine for complex flat-bed die cutting or embossing	ICPCF425C Set up machine for complex flat-bed die cutting or embossing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF425 Set up machine for complex flat-bed die cutting or embossing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate all safety devices on the flat-bed die cutting or embossing machine
- correctly set up TWO jobs (using either flat-bed die cutting OR embossing machine) changing type and size of substrates and design of finished patterns according to manufacturer's specifications, job timeframes, enterprise procedures and health and safety requirements, and incorporating a sample run to inspect and amend output.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Documentation and information

- identify the factors that must be considered when deciding on a cutting system
- identify the methods for registering and proofing the cutting devices

Mounting and installing flatbed devices

- explain what needs to be checked when the cutting devices are secured to the machine
- identify what criteria applies for determining the selection of particular cutting devices

Delivery systems

- describe areas of the delivery system to observe to maintain neat delivery of finished work
- describe areas of the delivery system to observe to prevent damage to finished product
- list ways the finished product can be secured for dispatch

For Reel System Only

- explain work health and safety (WHS) requirements for setting up reel transportation systems

- explain what adjustments to the unwind reel may be needed to suit various jobs
- identify important areas to consider during webbing procedures
- list and explain adjustments available to the web, and what to check when splicing/joining the web
- explain areas of the reel delivery system that may need adjustment according to job specifications
- explain when it would be necessary to adjust the:
 - sheeter during production
 - folder during production
 - rewind wheel during production
- list areas to check to ensure suitability of in-line processes

For Sheet System Only

- explain information concerning flat-bed die cutting or embossing found in the job documentation or production control system, and how this information is interpreted to ensure smooth workflow throughout the factory
- explain WHS requirements for setting up and/or operating sheet transport and delivery systems
- list important areas of the feeder unit set up
- explain adjustments to facilitate accurate sheet pick-up and transportation
- describe steps to ensure the delivery system operates effectively
- list common faults with the flat-bed cutting process

Setting up machines for complex flatbed die cutting or embossing

- explain WHS requirements for setting up cutting devices
- explain what to check when setting up, adjusting and operating flat-bed cutting devices
- explain how machine pressure and machine cutting depths are determined

In-line processes

- explain when it is necessary to adjust in-line units
- identify the largest/smallest size sheet that can be processed on this machine

Checking and adjustment

- identify details of the completed sample to check to ensure conformance with client requirements
- explain product testing procedures available and how often they should be used
- identify factors that indicate a need for replacement of knives/blades/cutting edges
- describe the process for storing cutting edges to guard against damage and deterioration
- identify machine manuals, safety and other documentation relevant to this task, where are they kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to:

- flatbed die cut and embossing equipment
- special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF426 Produce complex flat-bed die cut or embossed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the performance outcomes, skills and knowledge required to produce complex flat-bed die cutting or embossing.

This unit describes the skills and knowledge required for complex flat-bed die cutting or embossing.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain machine delivery system	1.1 Delivery systems are monitored and adjusted to ensure accurate and continuous operation and eliminate damage to finished product 1.2 Substrate is added to and removed from the process according to job specifications
2. Maintain complex flat-bed cutting process	2.1 Knife condition is monitored and adjusted to ensure product quality meets the approved sample standard

ELEMENT	PERFORMANCE CRITERIA
	2.2 Cutting pressures are monitored and adjusted to ensure product quality meets the approved sample standard 2.3 Registration of knife/knives is monitored and adjusted to ensure product quality meets the approved sample standard 2.4 Packing of cutting devices is monitored and adjusted to ensure product quality meets the approved sample standard 2.5 In-line printing/converting/binding/finishing processes are monitored and adjusted to ensure product quality meets the approved sample standard
3. Maintain operation of production process	3.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.2 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 3.3 Manual and/or automatic control is used according to job specifications 3.4 Performance is monitored and verified using the process control system according to enterprise procedures 3.5 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.6 Process adjustments to eliminate problems are reported according to enterprise procedures 3.7 Faulty performance of equipment is identified and reported according to enterprise procedures 3.8 Waste is sorted according to enterprise procedures
4. Identify and rectify problems	4.1 Problems in cutting (flat-bed) machine operation are identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to specified procedures, and are consistent with operator's skill level 4.3 Cutting (flat-bed) machine operation is checked to ensure correct operation
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Substrate waste is removed from operating area and recycled

ELEMENT	PERFORMANCE CRITERIA
	or disposed of, where required, according to regulatory requirements and enterprise procedures 5.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 5.5 Repair/adjustment is verified prior to resumption of operations
6. Clean flat-bed cutting machine at end of run	6.1 Knife and machine bed are cleaned ready for next run 6.2 Cutting devices are sharpened correctly according to WHS requirements and enterprise procedures 6.3 Cutting machine is disengaged and cleaned ready for next run 6.4 In-line printing/converting/binding/finishing units are cleaned ready for next run 6.5 Transportation and delivery systems are disengaged and cleaned ready for next run 6.6 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	3.2, 3.3, 5.1	Recognises and interprets text to confirm work requirements from information contained in specifications, organisational procedures and control systems
Writing	3.6, 3.7, 4.1, 5.4, 6.7	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.1-3.3, 3.6, 3.7, 4.1, 5.1, 5.2, 5.4	- Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies - Participates effectively in spoken interactions to confirm or clarify
Numeracy	1.1	Make estimations in relation to context
Navigate the world of work	1.1, 2.1-2.5, 3.1-3.4, 3.6-3.8, 4.1-4.3,	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and

	5.1-5.4, 6.1-6.6, 6.7	maintenance of equipment incorporating regulatory requirements and enterprise procedures
Interact with others	3.1, 5.1, 5.2, 5.4	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.2, 2.1-2.5, 3.1, 3.4, 3.5, 3.8, 4.1-4.3, 5.2-5.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel delivery system OR - sheet delivery system.
Monitoring and adjusting MUST include EITHER:	- reel stand, web control system, rewind reel and/or sheeting section OR - feeder/sheet pick-up and transport system, transfer system and delivery system.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF426 Produce complex flat-bed die	ICPCF426C Produce complex flat-bed die	Updated to meet Standards for	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
cut or embossed product	cut or embossed product	Training Packages	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF426 Produce complex flat-bed die cut or embossed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate all safety devices on either the flat-bed die cutting or embossing machine
- produce TWO complex jobs (including in-line processes) using EITHER the flat-bed die cutting OR embossing machine, with different substrates, sizes and patterns according to manufacturer's and job specifications, enterprise procedures and work health and safety (WHS) requirements
- demonstrate use of computerised control, monitoring and data entry systems if available and appropriate.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe WHS factors for setting up and/or operating machine transport systems
- outline checks to make when substrate is removed from the machine

For Reel Delivery Systems Only

- explain areas of the:
- reel stand to monitor to ensure trouble-free operation
- web control system to adjust to maintain correct web tension
- web control system to adjust to maintain correct positioning of the web
- delivery system to observe to maintain quality and prevent damage to the finished product

For Sheet Delivery Systems Only

- explain areas of the:
- sheet-fed feeder to monitor to ensure trouble-free operation
- sheet pick-up system to adjust to ensure accurate and continuous sheet handling

Flat bed cutting operations

- describe WHS factors for maintaining the cutting process
- explain indicators that demand replacement of a knife
- determine checks to make when cutting pressure is adjusted
- list ways registration can be guaranteed
- explain what production difficulties can be expected during production runs

Machine problems and cutting faults

- describe WHS factors for problem-solving on the machine maintaining the cutting process
- identify checks to make when:
 - packing cutting devices
 - correcting dull cutting edges on equipment
 - correcting the depth of embossing
 - correcting out-of-square results

Machine shut down and cleaning

- describe WHS factors for conducting machine shutdown procedures
- identify what checks to make when:
 - waste is removed from the machine and surrounding area for disposal or recycling
 - shutting down and/or disengaging the machine
 - cutting devices or knives are cleaned or replaced ready for next run
- list areas of the machine to clean at the end of the run

Quality assurance

- describe production records to keep or write up, and the information to include
- explain quality aspects to consider in a completed cutting job
- describe steps to ensure important features of the production control system are followed

Information sources

- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and the information included in them
- explain other available sources of information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to:

- special purpose tools, equipment and materials
- industry software packages
- flat bed die cut and embossing equipment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF465 Set up and produce hand-bound book

Modification History

Release	Comments
Release 2	This version released with ICP Printing and Graphic Arts Training Package Version 2.0. Version created to fix typographical error
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce hand-bound books including set up and assembly of materials, and techniques involving adhesive binding/tipping, sewing, forwarding, blocking and hand finishing.

It applies to individuals who may assemble, bind and cover books, other publications and printed products by hand or machine, with limited responsibility to ensure the production process is maintained.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation

ELEMENT	PERFORMANCE CRITERIA
	1.2 All necessary materials are assembled according to job specifications
2. Complete adhesive binding/tipping	2.1 Sheets are fanned and masked every 3-4 mm 2.2 Thin even coating of adhesive is applied on area of sheet designated for tipping 2.3 Correct adhesive is applied to achieve a good bond 2.4 Tipped sheet is accurately positioned
3. Number book	3.1 Sheets are placed in correct sequence and numbered correctly according to job specifications 3.2 Numbering machine is set for appropriate number of copies 3.3 Sheets are knocked up squarely without damage
4. Index book	4.1 Index is spaced correctly and evenly 4.2 Durable square, clean and neat cut tabs or cut-outs are constructed 4.3 Headings are constructed legible and permanent
5. Apply adhesive binding/padding by hand	5.1 Product is knocked up squarely to spine and head with boards inserted between pads 5.2 Spine folds are completely removed from sections in guillotine 5.3 Adequate spine margin is preserved 5.4 Appropriate number of saw cuts are made in work 5.5 Edge of spine is roughened sufficiently to improve adhesion 5.6 Thin even application of appropriate adhesive is applied 5.7 Book is fanned before gluing (except for pads) to ensure increased surface coverage 5.8 Thoroughness of adhesive is assessed after book has dried
6. Sew sections	6.1 Appropriate sewing supports are selected and spaced according to job specifications 6.2 Consistent thread tension is maintained during sewing 6.3 Sections are aligned at the head 6.4 Swelling is monitored and controlled
7. Forward book	7.1 Spine is glued, rounded and backed 7.2 Spine lining is attached

ELEMENT	PERFORMANCE CRITERIA
	7.3 Text block is covered (board attached) 7.4 Text block is cased in
8. Block book	8.1 Image is blocked into required position according to job specifications
9. Hand finish book	9.1 Hand finish book according to job specifications 9.2 Typeface size and type are appropriate 9.3 Design is in keeping with the period of publication 9.4 Embellishment is evenly applied

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 3.1, 6.1, 8.1, 9.1	Recognises and interprets text and diagrams to establish job requirements from information contained in specifications
Numeracy	2.1, 3.1, 3.2, 5.3, 5.4	Uses mathematical concepts to estimate measurement, calculate quantities and to ensure correct sequence of number sheets
Get the work done	1.1, 1.2, 2.1-2.3, 3.1-3.3, 4.1-4.3, 5.1-5.8, 6.1-6.4, 7.1-7.4, 8.1, 9.1-9.4	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Implements actions as per instructions, making slight adjustments if necessary - Plans, identifies and assembles resources required to complete tasks - Makes routine decisions directly related to completion of set tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF465 Set up and produce hand-bound book Release 2	ICPCBF465 Set up and produce hand-bound book Release 1	Updated to fix typographical error	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF465 Set up and produce hand-bound book

Modification History

Release	Comments
Release 2	This version released with ICP Printing and Graphic Arts Training Package Version 2.0. Version created to fix typographical error
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up and produce at least THREE hand-bound books within the accepted production timeframe, according to job specifications and enterprise procedures; use a range of substrates and pulling down and section sewing on the multi-section books (minimum of ten sections).

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Work health and safety (WHS)

- explain WHS concerns relating to hand binding

Adhesive binding/tipping

- explain 'viscosity'
- explain the role of grain direction in relation to the tipping operation
- identify recommended tipping width for endpapers and the recommended adhesive to use in tipping

Numbering

- explain what needs to be checked when the numbering machine is:

- set for duplicate/triplicate numbering
- re-inked
- explain how a given number is set on the machine

Indexing

- list different types of indices and ways to reinforce an index
- explain how an index is evenly and correctly spaced down the sheet

Adhesive binding/padding

- identify adhesives not recommended for padding, and explain why some of these adhesives are not suitable
- explain the terms ‘pH’, ‘viscosity’, ‘open time’, ‘tack’, ‘specific adhesion’, ‘molecular adhesion’ and ‘mechanical adhesion’
- list techniques to ensure permanent adhesion of the padded sheets
- name ways the padding operation can be accelerated

Sewing

- identify different methods of hand sewing
- describe important considerations to be addressed when setting up for sewing
- describe the importance of using a sewing frame
- identify the ‘cord’ (calliper) thread suitable for sewing 8pp sections
- describe checks to make when sewing thread is joined during the sewing operation
- identify checks to make when the sewing operation is finished off
- describe the result of sewing being too loose/too tight

Book forwarding

- describe the important result to achieve when gluing the book spine, and what occurs if the spine glue is too thick/too thin
- explain how to recognise a correct round in a book spine
- outline problems likely if too much round is applied to the spine
- outline problems likely if insufficient round is applied to the spine
- name different spine linings and reasons for spine linings
- describe special techniques applied to 2-on 2-off spine linings
- explain the important considerations to be given to spine linings
- identify the correct direction of the grain in spine linings
- describe the result if the grain direction in the spine lining is incorrect
- describe how to recognise a good corner
- identify the recommended turn-in
- identify steps to ensure a clean job
- describe how to ‘trim-out’ a case
- explain the correct board calliper on a book
- identify the micron board recommended on a book 5mm thick
- explain what to monitor when casing-in a book

Blocking

- explain which procedures ensure a good blocking result
- describe the checks to do when positioning type on a book spine, and when positioning type on the front of a book
- explain ‘blind blocking’

Hand finishing

- name methods of hand finishing a book cover
- explain criteria used to ensure an appropriate typeface is selected
- explain criteria used to ensure the design chosen corresponds with the era of the book
- explain what considerations to give to hand finishing a book
- describe the result of uneven impressions

Information sources

- identify manuals and safety documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to:

- special purpose tools, equipment, materials
- industry software packages.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPCBF467 Restore books

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to determine the condition and appropriate materials and techniques required to restore a book.

It applies to individuals who apply solutions to a defined range of problems relating to the restoration and production of hand bound books.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Converting, Binding and Finishing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Assess physical condition of book to be rebound/restored	1.1 Physical construction and binding style of the book are identified 1.2 Areas of damage and weakness are identified and recorded
2. Identify and select treatment options	2.1 Paper and cover cleaning options are assessed 2.2 Paper and cover repair options are assessed 2.3 Ethical/rarity/value cost alternatives are evaluated 2.4 Treatment options are discussed with owner

ELEMENT	PERFORMANCE CRITERIA
3. Assemble materials for binding	3.1 Materials and equipment are assembled according to job specifications 3.2 Binding equipment is set up according to job specifications
4. Dissect/pull down book	4.1 Original page securing method and section structure are determined 4.2 Cover/endpapers, threads and stitches are removed with minimal damage to sections and text 4.3 Sheets and sections are cleaned with minimal damage 4.4 Dog-ears are straightened with old joints flattened 4.5 Book is pressed
5. Treat paper	5.1 Paper is cleaned using dry or wet methods as appropriate 5.2 Paper is de-acidified if necessary by most appropriate method 5.3 Paper is repaired and/or reinforced using appropriate methods 5.4 Paper is resized if required 5.5 New paper is tinted to resemble original if requested 5.6 Wire stitches or sewing threads are removed 5.7 Original adhesive is removed without damaging the book
6. Resew book	6.1 Appropriate sewing supports are selected and spaced according to job specifications 6.2 Consistent thread tension is maintained during sewing 6.3 Sections are aligned at the head 6.4 Swelling is monitored and controlled 6.5 Headbands are re-sewn if necessary
7. Forward book by hand	7.1 Old spine and sides and turn-ins are lifted and reattached if rebacking is necessary 7.2 Edges are knocked up into original alignment 7.3 Round and back spine are glued 7.4 Spine lining is attached 7.5 Appropriate corner repairs on coverboards are carried out 7.6 Boards are reattached 7.7 New covering material is tinted to resemble original if requested

ELEMENT	PERFORMANCE CRITERIA
	7.8 Text blocks are covered or rebacked 7.9 Endpapers are pasted down or hinge realigned 7.10 Book is opened after pressing
8. Finish book by hand	8.1 Book is hand finished according to job specifications 8.2 Typeface size and type are appropriate 8.3 Design is in keeping with period of publication 8.4 An even embellishment is applied

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	3.1, 3.2, 6.1, 8.1	Recognises and interprets text and diagrams to establish job requirements from information contained within specifications
Writing	1.2	Completes required records using clear and precise language
Oral Communication	2.4	- Uses appropriate language to provide information to clients - Uses questioning and uses listening skills to confirm understanding
Numeracy	2.3, 5.4	Uses mathematical calculations to analyse cost alternatives against the value of the product and to determine appropriate paper size during treatment
Interact with others	2.4	Uses collaborative techniques to engage clients in discussions
Get the work done	1.1, 1.2, 2.1-2.3, 3.1, 3.2, 4.1-4.3, 5.1-5.5, 6.1, 6.2, 6.4, 6.5, 7.1, 7.5, 7.7, 7.9, 8.1-8.4	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Implements actions as per instructions, making slight adjustments if necessary - Plans, identifies and assembles resources required to complete tasks - Analyses alternatives to make decisions directly related to completion of set tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPCBF467 Restore books	ICPCF467C Restore books	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPCBF467 Restore books

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly assess the physical condition and restore TWO books (one requiring rebacking and one requiring rebinding) according to job specifications, enterprise procedures and production timeframes.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Determine physical condition of a book to be rebound/restored

- identify factors that render a book unsuitable for restoration/rebinding and possible options to suggest
- explain areas of a book most commonly in need of attention
- explain how areas of weakness and damage are identified and recorded
- identify and select treatment options
- explain available paper and cover cleaning options
- list methods of repairing a tear in paper
- describe how to replace a missing corner of a book page
- identify situations when there is a need to reback a book
- describe steps to repair a coverboard corner
- explain methods of treating aged leather

Assemble materials for binding

- explain work health and safety (WHS) factors for restoring books

- name tools used when gold finishing books
- name adhesives used in book restoration and repair, and describe under what circumstances each is used
- identify possible covering materials and indicate where each is used
- explain styles of book edge decoration
- name and describe methods of tanning leather
- explain how covering material is selected for a given job
- explain what to monitor when paring leather and when sharpening knives for leather paring
- name types of leather commonly used in bookbinding
- explain the term 'skiver'

Dissecting/pulling down

- list different page securing methods
- explain how to remove endpapers with minimal damage
- explain how to clean sections without damage
- define the terms 'dog-ears' and 'joints'
- describe special care to take when removing wire stitches/sewing thread
- identify and describe different methods of removing adhesive from the book spine
- identify types of adhesive that might be found on book spines

Section sewing

- name methods of hand sewing and important considerations when setting up for sewing
- explain why a sewing frame is used
- describe how thickness of thread is chosen
- explain what to check when sewing thread is joined during the sewing operation and when the sewing operation is finished off
- explain the result if sewing is too loose/too tight
- describe hand-worked headband styles

Book forwarding

- explain the important result to achieve when gluing the spine of the book, and the outcome if the spine glue is too thick/too thin
- explain how to recognise a correct spine shape
- describe problems likely if too much round or insufficient round is applied to the spine
- name different spine linings and styles they are used on
- state reasons for spine linings
- explain special techniques applied to 2-on 2-off spine linings
- explain important considerations for spine linings
- describe how to recognise a good corner

- explain the recommended turn-in
- list steps to ensure a clean job
- explain ‘trimming-out’
- explain what determines the correct board calliper on a book
- identify what micron board is recommended on a book 5mm thick
- explain to monitor when casing-in a book

Hand finishing

- name methods of hand finishing a book cover
- identify criteria used to ensure an appropriate typeface is selected
- outline criteria used to ensure the design chosen corresponds with the era of the book
- describe the result of uneven impressions
- describe the method to correct an error in finishing the title

Quality assurance

- describe quality aspects found in a competently restored book
- list steps to ensure cost effectiveness of book restoration
- explain what can be done to maintain the rarity component of a book
- identify machine manuals and safety documentation relevant to this task, where they are kept, and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the converting, binding and finishing field of work and include access to special purpose tools, equipment and materials used to restore books.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPDMT263 Access and use the internet

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to use the internet to browse and download information and includes identifying required software and security risks.

It applies to individuals who create electronic documents and use multimedia information within their work environments.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Digital media technologies

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Identify and use local resources	1.1 Installed internet software applications and their purposes are identified 1.2 Internet software applications are used online and offline 1.3 Extracting (decompressing) software and virus scanners are used on downloaded files 1.4 Internet connection and protocols are identified 1.5 Applications and files are downloaded and installed correctly 1.6 Potential security risks are identified and avoided

ELEMENT	PERFORMANCE CRITERIA
2 Identify and use remote resources	2.1 Websites are navigated to locate required information 2.2 Files and documents are accessed using internet search engines 2.3 Internet is browsed to find related sites via links 2.4 Files are retrieved from File Transfer Protocol (FTP) repository 2.5 Emails are sent, downloaded, read, responded to and saved 2.6 Files attached to incoming email are retrieved and attached files are saved 2.7 Newsgroups relevant to industry are accessed

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.5, 2.1-2.5	- Locates and interprets information from online sources - Follows written instructions displayed on computer screens
Writing	2.5	Composes and sends emails to convey information or to respond to emails received
Get the work done	1.1-1.6, 2.1-2.7	- Uses digital technologies and systems to locate, enter and present information and to communicate with others - Follows required protocols for accessing and storing electronic information - Identifies potential security problems and implements appropriate prevention measures related to own tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPDMT263 Access	ICPMM263C Access	Updated to meet Standards for	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
and use the internet	and use the Internet	Training Packages	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPDMT263 Access and use the internet

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- download and install an application from the internet correctly and safely
- use software to extract and virus-scan downloaded files or applications
- perform an internet search to locate specific information
- send an email with a correctly formatted attachment
- respond to an email which has attachments and save the attached files
- contribute to a newsgroup .

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list potential security risks when downloading applications or files from the internet and describe ways to avoid these risks
- identify possible causes of a failed connection attempt and processes for correcting failures
- explain the differences between an online and offline internet software application
- explain why extracting and virus scanning software are used
- explain what a search engine does and identify TWO search engines
- explain the following terms or acronyms:
 - Uniform Resource Locator (URL)
 - File Transfer Protocol (FTP)
 - shareware
- explain why email might be used to respond to a newsgroup post

- identify in which of these maintaining (upper or lower) case is important: URLs, file names, passwords
- explain what 'zip' files are and why are they used
- identify the difference between Java and JavaScript
- identify ways to use the internet to obtain product information and technical support
- explain the privacy information that should not be provided when filling out a form on a web page
- explain what cookies are
- identify the types of files that can carry viruses
- explain the importance of scanning for viruses before and after extracting files from a compressed archive.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the digital media technologies field of work and include access to the internet and relevant software applications.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPDMT296 Create and test an interactive CD-ROM/DVD

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce an interactive CD-ROM/DVD.

It applies to individuals who are responsible for the creation and testing of all interactive functions to ensure that the automatic start and other functions operate correctly.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Digital media technologies

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Confirm data requirements	1.1 All details required for job are checked and confirmed against job specifications 1.2 Media content is tested to ensure all interactivity performs according to job specifications 1.3 Media is compressed correctly with images at right resolution and any text in correct format

ELEMENT	PERFORMANCE CRITERIA
2 Prepare CD-ROM/DVD structure	2.1 Target audience is identified from job specifications 2.2 Welcome page is developed that identifies navigational structure of media 2.3 Folders for containing media are prepared according to interactivity requirements 2.4 All files are named using correct filename convention
3 Set up auto functions	3.1 Autorun is set up to automatically start up CD-ROM/DVD media 3.2 ShelExec.exe is incorporated into autorun script to ensure default programs within shell are started 3.3 Autorun is linked to reader in case target audience does not have one pre-installed 3.4 Where autorun is linked to Adobe Reader, JavaScript is added to appropriate folder to launch PDF file
4 Burn CD-ROM/DVD	4.1 CD-ROM/DVD layout is validated and saved correctly 4.2 Preferred CD-ROM/DVD format is chosen for job 4.3 Test CD-ROM/DVD is burned to test automatic functions and confirm interactivity across different platforms 4.4 Master disc is produced for mass duplication

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1	Interprets textual information to determine job requirements
Writing	2.2, 2.4	- Uses correct terminology and format to convey navigational structures - Uses required file naming conventions
Numeracy	1.3	Uses mathematical techniques to determine and confirm correct image resolution
Get the work	1.2, 1.3, 2.1-2.4,	Takes responsibility for planning, organising and implementing tasks required to produce products that

done	3.1-3.4, 4.1-4.4	- meet job requirements - Analyses job requirements to decide on appropriate formats, functions and structures - Systematically tests functionality of CDs or DVDs to identify operational errors - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPDMT296 Create and test an interactive CD-ROM/DVD	ICPMM296C Create and test a CD-ROM/DVD	Updated to meet Standards for Training Packages. Title changed.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPDMT296 Create and test an interactive CD-ROM/DVD

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce TWO CD-ROMs/DVDs which:
 - include different interactive functions
 - start automatically with autorun
 - will link with a reader for computers without a reader installed
 - have no errors in any of the interactive functions
 - meet job and organisational requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the purpose of compression technologies
- identify relevant media types and multimedia software to create and test a CD-ROM/DVD
- describe relevant CD/DVD hardware for burning CDs/DVDs
- explain the requirements for multimedia navigation
- explain the purpose of scripting languages
- clarify types and purposes of different multimedia file formats.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the digital media technologies field of work and include access to appropriate computer hardware and software.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPDMT321 Capture a digital image

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to evaluate and use digital camera technology and alter and upload digital images.

It applies to individuals who may work in a team environment with some responsibility for producing quality outcomes based on requirements.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Digital media technologies

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Assess digital camera qualities	1.1 Camera software compatibility with hardware system is assessed and appropriate software is selected for job 1.2 Pixel resolution of camera is matched to required quality and resolution of outcome 1.3 RAM capacity of camera is checked to be sufficient for number of images required to be captured 1.4 Shutter speed, focal lengths and camera feature modes are assessed as suitable for quality and use of photographic images

ELEMENT	PERFORMANCE CRITERIA
	required 1.5 Lithium batteries are handled and stored according to work health and safety (WHS) requirements
2 Set up for image capture	2.1 Camera is set up for image composition according to job specifications 2.2 Lighting is arranged according to job specifications 2.3 Light intensity is set for correct exposure
3 Preview image	3.1 Tone curves are adjusted according to job specifications 3.2 Neutral balance of image is arranged and adjusted 3.3 Adjustments to image composition and exposure are made
4 Photograph and upload digital image	4.1 Digital camera is loaded and operated according to manufacturer's and job specifications appropriate to quality of image to be photographed 4.2 File is uploaded on to relevant computer and image saved on hard disk 4.3 Photographic image files are created and stored on computer 4.4 Photographic images are enhanced, cropped and altered electronically to deliver required image 4.5 Photographic images are checked to ensure they meet job brief 4.6 Photographic images are delivered using required delivery mode

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.5, 2.1, 2.2, 3.1, 4.1, 4.5	Interprets textual information to determine and confirm job requirements
Writing	4.3	Uses required conventions to name electronic files
Numeracy	1.2-1.4, 2.3	- Recognises mathematical data related to memory capacity - Uses basic mathematical calculations to select

		appropriate camera features related to shutter speed, focal length or pixel resolutions
Navigate the world of work	1.5	Adheres to legislative requirements related to own role with specific reference to safety
Get the work done	1.1-1.4, 2.1-2.3, 3.1-3.3, 4.1-4.6	- Plans and implements tasks required to complete jobs according to specifications - Assesses job requirements to make decisions related to camera settings and image outputs - Analyses image quality problems and identifies and implements appropriate correction methods - Understands the purposes, specific functions and key features of common digital systems and tools and operates them effectively to produce digital images

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPDMT321 Capture a digital image	ICPMM321C Capture a digital image	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPDMT321 Capture a digital image

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- find and use information relevant to the task from various sources
- set up a digital camera correctly and safely
- use a digital camera to:
 - preview and capture THREE digital images
 - transfer images to a computer
 - use relevant software to produce final images that meet job requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify and explain the key features of the digital camera that impact on the quality of the photographic image
- determine the safety requirements for handling and storing lithium batteries
- explain how to transfer and store images from a camera to a computer list and describe ways that photographic images can be altered or enhanced electronically
- explain why the required delivery mode is important when preparing a photographic image.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the digital media technologies field of work and include access to:

- a digital camera
- computer hardware and software
- photographic equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPDMT322 Edit a digital image

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to edit and manipulate an image captured using digital equipment.

It applies to individuals who prepare files for export to electronic image assembly.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Digital media technologies

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Assess digital image	1.1 Digital image is opened and resolution parameters assessed against job specifications 1.2 Image is converted from Red Green Blue (RGB) to Cyan Magenta Yellow Black (CMYK) colour space 1.3 Image characteristics are evaluated for colour and tone requirements
2 Edit digital image	2.1 Suitable software is engaged to enable print image profiling and/or manipulation to suit print requirement 2.2 Image is retouched to conform with job specifications

ELEMENT	PERFORMANCE CRITERIA
	2.3 Local colour correction is employed to conform with job specifications 2.4 Tone correction is undertaken to conform with job specifications 2.5 Edited image is saved to conform with job specifications 2.6 Image storage requirements are identified and employed 2.7 Image is saved ready for export

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.2-2.6	Recognises and interprets textual information to determine and confirm job requirements
Numeracy	1.1	Applies basic mathematical formulas to calculate image resolution requirements
Get the work done	1.1-1.3, 2.1-2.7	- Plans and implements tasks required to complete jobs according to specifications provided - Examines images and makes routine decisions about resolution and editing requirements - Understands the purposes, specific functions and key features of common digital systems and tools and operates them effectively to edit digital images

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPDMT322 Edit a digital image	ICPMM322C Edit a digital image	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPDMT322 Edit a digital image

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- interpret instructions in job specifications to determine task requirements
- open and convert an image to required colour space
- use suitable software to edit and save an image ready for export according to job specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain why some images require editing or manipulation
- explain what image profiling is and why it could be required
- explain why image storage requirements should be identified
- explain when a Joint Photographic Experts Group (JPEG) rather than a Tagged Image File Format (TIFF) would be selected as a file format
- list and describe factors which may influence the grey balance and colour in an image.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the digital media technologies field of work and include access to appropriate image manipulation software, hardware and file storage capability.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPDMT344 Manipulate and incorporate audio into multimedia presentations

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to edit, combine and incorporate audio into multimedia presentations.

It applies to individuals who determine audio requirements from job specifications and use digital software to prepare audio tracks.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Digital media technologies

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Identify and describe formats of digital audio	1.1 Distinguishing features and uses of analogue and digital audio are determined 1.2 Terms describing audio characteristics are used correctly 1.3 Contemporary digital audio formats and their application in achieving defined outcomes are identified 1.4 Data rates for major digital sources and their relevance to

ELEMENT	PERFORMANCE CRITERIA
	defined outcomes are determined 1.5 Appropriate methods for saving and producing digital audio outputs are determined for range of sources and destinations 1.6 Sampling techniques and sources for digital audio appropriate to defined outcomes are determined 1.7 Uses of Musical Instrument Digital Interface (MIDI) technology are determined
2 Use digital audio software	2.1 Appropriate digital audio software is assessed and selected for job 2.2 Programs are used to edit and manipulate audio according to job specifications
3 Edit digital audio	3.1 Single and multiple audio tracks are edited to achieve defined outcome 3.2 Multiple tracks of digital audio are joined according to job specifications 3.3 Digital effects are employed to modify and integrate digital audio tracks according to job specifications 3.4 Time encoding is applied to single and multiple edited digital audio tracks according to job specifications 3.5 Audio track is inserted into multimedia production sequence according to job specifications
4 Construct digital audio track	4.1 Techniques for hooking sounds are identified 4.2 Defects on sound recordings are eliminated and/or treated 4.3 Special effects and mixing techniques are used on audio track according to job specifications 4.4 Sequencers are used to create digital audio tracks according to job specifications 4.5 MIDI and sound cards are used to create digital audio according to job specifications 4.6 Audio track is produced using appropriate track construction software and hardware 4.7 Audio tracks are saved in appropriate file formats

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.4, 1.6, 2.1, 2.2, 3.2-3.5, 4.3-4.5	Interprets textual information to establish audio format and software requirements
Oral Communication	1.2, 4.2, 4.3	- Uses clear technical terminology to describe audio characteristics - Uses listening techniques to identify audio issues
Numeracy	1.4, 3.4	Recognises numerical data to identify digital audio formats and apply time encoding and data rates
Get the work done	1.1, 1.3, 1.5-1.7, 2.1, 2.2, 3.1-3.5, 4.1-4.7	- Plans and implements tasks required to complete jobs according to specifications - Assesses alternatives and makes routine decisions directly related to own role - Identifies and rectifies defects in sound recordings - Understands the purposes, functions and features of digital systems and tools used for sound recording and editing, and uses them effectively to complete tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPDMT344 Manipulate and incorporate audio into multimedia presentations	ICPMM344C Manipulate and incorporate audio into multimedia presentations	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPDMT344 Manipulate and incorporate audio into multimedia presentations

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- construct, edit and incorporate audio elements into at least TWO different multimedia sequences including:
 - finding and using information relevant to the task from a variety of sources
 - interpreting requirements from job specifications
 - selecting and using suitable software and hardware.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify the distinguishing features of analogue and digital audio
- explain the terms: amplitude, sound waves, frequency, mono and stereo
- identify the main contemporary digital audio formats
- describe data rates that apply to selected digital sources
- identify sampling, sampling techniques and sources for sampling digital audio
- explain the different uses of Musical Instrument Digital Interface (MIDI) technology
- identify the distinguishing features of selected digital audio software
- explain the purpose of an audio frame when saving and producing digital audio outputs
- explain the process to join multiple tracks of digital audio
- identify the types of digital effects that are used to modify and integrate digital audio tracks
- explain the purpose of time encoding
- clarify how sequencers are used to create digital audio tracks
- explain the purposes of sound cards.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the digital media technologies field of work and include access to software, hardware and equipment and materials required for construction and editing of sound files.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPDMT346 Incorporate video into multimedia presentations

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to edit and add video to multimedia presentations.

It applies to individuals who select and use appropriate software and hardware to produce digital video sequences to meet required outcomes.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Digital media technologies

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Identify and describe formats of digital video	1.1 Distinguishing features and uses of range of digital video software are determined 1.2 Current video software appropriate to range of given outcomes is selected 1.3 Limiting factors of computer hardware on video production for specified job are determined 1.4 Differences of image quality and image size required to deliver desired outcome are determined

ELEMENT	PERFORMANCE CRITERIA
	1.5 Data input, processing and output relevant to video are explained 1.6 Formats employed to create given computer video sequence for specified outcome are analysed
2 Design digital video	2.1 Appropriate digital video software for job is assessed and selected 2.2 Digital video editing software is used to combine video assets 2.3 Variations in video frame rates are controlled as required for job to be undertaken 2.4 Time stamping techniques are applied to video frames as required 2.5 Digital video is saved using appropriate file techniques
3 Edit digital video	3.1 Single and multiple video tracks are edited to achieve defined outcome 3.2 Multiple tracks of digital video are joined according to job specifications 3.3 Digital effects are employed to modify and integrate digital video tracks according to job specifications 3.4 Time encoding is applied to single and multiple edited digital video tracks according to job specifications 3.5 Video track is inserted into multimedia production sequence according to job specifications
4 Present digital video sequence	4.1 Digital video is tested and combined with other digital imaging, sound and/or animation to create multimedia sequence 4.2 Multimedia sequence including video is saved and presented to client

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.1, 2.3, 2.4, 3.3-3.5	Interprets textual information to establish or confirm job requirements

Oral Communication	1.5	Uses clear technical terminology to provide information about video to others
Numeracy	1.4, 2.3, 2.4, 3.4	Uses simple mathematical calculations to verify image quality and image size and to measure frame frequencies and track lengths
Interact with others	4.2	Selects and uses appropriate communication methods and protocols when presenting information to clients
Get the work done	1.1-1.4, 1.6, 2.1-2.5, 3.1-3.5, 4.1, 4.2	- Plans and implements tasks required to complete jobs according to specifications - Determines requirements and makes routine decisions directly related to completion of tasks - Understands the purposes, functions and features of digital systems and tools used for video recording and editing, and uses them effectively to complete tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPDMT346 Incorporate video into multimedia presentations	ICPMM346C Incorporate video into multimedia presentations	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPDMT346 Incorporate video into multimedia presentations

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- design, compile, edit and present at least TWO multimedia sequences incorporating video including:
 - interpreting requirements from job specifications
 - selecting and using suitable software and hardware.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline important considerations when combining digital video with other digital imaging, sound and/or animation to create a multimedia sequence
- summarise the features of current video software programs, including the differences between the programs
- explain the limiting factors of video production on computers
- determine how the differences of image quality and image size are obtained
- describe the process used to combine video assets
- explain how variations in video frame rates are controlled
- explain why time stamping techniques are applied to video frames.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the digital media technologies field of work and include access to software, hardware and equipment and materials required for construction and editing of video files.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPDMT491 Create an extensible document

Modification History

Release	Comments
Release 2	This version first released with ICP Printing and Graphic Arts Training Package Version 1.1. Version created to correct mapping table information.
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to create a well-formed syntax error-free Extensible Mark-up Language/Personalised Print Mark-up Language (XML/PPML) document.

It applies to individuals who have the responsibility to ensure requirements meet the current and future needs of the business.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICTWEB429	Create a markup language document to specification

Unit Sector

Digital media technologies

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Define document structure	1.1 All details required for job are checked and confirmed against job specifications 1.2 Mark-up language version and character encoding used in document or declaration statement are defined and/or inserted in document 1.3 External or internal Document Type Definition (DTD) or mark-up language schema is chosen and correctly wrapped and referenced depending on project requirements 1.4 Root element is correctly defined and all elements are accurately nested 1.5 Attribute types and default values are declared, where necessary, to provide information about data 1.6 Occurrences of elements are stated and elements of mixed content declared
2 Confirm validity	2.1 Start and end tags are included and closed to ensure no element errors 2.2 Namespaces are used to resolve name conflicts 2.3 Checks are performed to ensure that document is well-formed, error-free and conforms to mark-up language syntax rules 2.4 Document is checked to ensure it conforms to rules of DTD or mark-up language schema
3 Finalise and test document	3.1 Character Data (CDATA) sections are added to document structure 3.2 Final document is viewed with mark-up language parser 3.3 Mark-up language document is well formed, free of errors and meets needs of business 3.4 Document is linked to extensible style sheet and template, and tested 3.5 Document is made extensible to meet future business needs

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.6, 2.1, 2.3, 2.4, 3.2-3.5	- Interprets textual information to identify job requirements - Proofreads texts to ensure accuracy and compliance with mark-up language syntax rules
Writing	1.2, 1.3, 1.6, 2.1, 3.1	Uses industry specific language to produce and edit technical documents
Get the work done	1.1-1.6, 2.1-2.4, 3.1-3.5	- Plans, organises and implements steps required to construct a valid document that meets organisational requirements - Analyses documents to identify and correct errors in mark-up language - Selects and uses appropriate digital software and tools to create mark-up language document

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPDMT491 Create an extensible document	ICPMM491D Create an extensible document	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPDMT491 Create an extensible document

Modification History

Release	Comments
Release 2	This version first released with ICP Printing and Graphic Arts Training Package Version 1.1. Version created to correct mapping table information.
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce TWO Extensible Mark-up Language (XML) documents that are well-formed, free of errors and meet the job specifications
- validate and parse both XML files

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain what a Standard Generalised Mark-up Language (SGML) is and what is used for
- explain how SGML relates to XML and Personalised Print Mark-up Language (PPML)
- explain the differences between SGML, PPML and XML and when to use SGML over XML
- describe how Cascading Style Sheets (CSS) and Extensible Stylesheet Language (XSL) differ
- explain the purpose of XSL
- explain when to use XML over Hyper Text Mark-up Language(HTML) and why
- explain how PPML relates to XML
- outline ways to use XML and HTML with the one set of data
- explain the purpose of metadata within a mark-up language document.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the digital media technologies field of work and include access to a standalone computer and mark-up language parser.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPDMT492 Create an extensible style sheet

Modification History

Release	Comments
Release 2	This version first released with ICP Printing and Graphic Arts Training Package Version 1.1. Version created to correct mapping table information.
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to create extensible style sheets which transform Extensible Mark-up Language/Personalised Print Mark-up Language (XML/PPML) into screen or print output.

It applies to individuals who create extensible style sheets for electronic publishing or online documents including computer screens and handheld devices. Individuals incorporate the presentation and transformation requirements in the style sheets and templates.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICTWEB429	Create a markup language document to specification

Unit Sector

Digital media technologies

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare source document	1.1 Source document is validated as free of errors 1.2 Style and transformation requirements of source document are confirmed 1.3 Advanced styling requirements are confirmed as required 1.4 Different media, display formats and target audience preferred platforms and abilities are confirmed 1.5 Source document is prepared for style sheet
2 Create style sheet	2.1 Multiple templates are designed and applied to style sheet 2.2 Style sheet is developed using required presentation styles 2.3 Transformation requirements are incorporated into several style sheets 2.4 Style sheet is associated and/or linked with source document and tested
3 Test style sheet	3.1 Style sheets are validated to ensure correct presentation and transformation 3.2 Style sheet is updated if errors occur and validated again 3.3 Style sheet is linked to data-store and to digital template, and tested 3.4 Style sheet is made extensible to meet future business needs

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.4, 2.1, 2.2, 2.4, 3.1, 3.4	- Interprets textual information to identify job requirements - Proofreads texts to ensure accuracy and conformity with job requirements
Writing	1.5, 2.1-2.3, 3.2	Uses industry specific language to produce and edit

		technical documents
Interact with others	1.3, 1.4	Selects and uses appropriate method and form of communication to confirm requirements with relevant persons
Get the work done	1.1-1.4, 2.1-2.4, 3.1-3.4	- Plans, organises and implements activities required to create style sheets that meet organisational and user requirements - Analyses documents to identify and correct errors - Selects and uses appropriate digital software and tools to create extensible style sheets

Mapping

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPDMT492 Create an extensible style sheet	ICPMM492D Create an extensible style sheet	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPDMT492 Create an extensible style sheet

Modification History

Release	Comments
Release 2	This version first released with ICP Printing and Graphic Arts Training Package Version 1.1. Version created to correct mapping table information.
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- create extensible style sheets for electronic publishing or online documents.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the application of Document Style Semantics and Specification Language (DSSSL), where it can be used to develop an extensible style sheet
- explain the intended purpose of Extensible Stylesheet Language (XSL)
- explain when to use an Extensible Mark-up Language (XML) in preference to Hyper Text Mark-up Language (HTML)
- describe the ways to use both XML and HTML with the one set of data
- describe how Personalised Print Mark-up Language (PPML) relates to XML
- describe a work-based example of the application of metadata and/or PRISM
- outline the essential differences between metadata and PRISM.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the digital media technologies field of work and include access to industry standard software and relevant hardware.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPDMT581 Manage multimedia production

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manage the multimedia production cycle.

It applies to individuals who are responsible for the entire production cycle including researching requirements, designing and developing products, quality testing and liaising with clients.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Digital media technologies

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Design production cycle for multimedia product	1.1 Management components of production cycle are identified and coordinated to achieve defined outcome 1.2 Concepts for multimedia integration are put forward and their sequence planned 1.3 Prototype sequences are designed and tested according to job specifications 1.4 Multimedia production is undertaken that conforms to product

ELEMENT	PERFORMANCE CRITERIA
	specifications 1.5 Final product is tested for conformance to specifications and released to client
2 Define attributes of interactive multimedia products	2.1 Attributes of hypermedia are defined and incorporated into given productions when required 2.2 Attributes of hypertext are defined and incorporated into given productions when required 2.3 Linear and interactive information structures are distinguished and incorporated into productions when required
3 Manage research	3.1 Client specifications are researched and checked with client to deliver desired outcome 3.2 Files, documents, images and footage relevant to project requirements are sourced and their functions documented and sequenced 3.3 Liaison with clients is undertaken, records of interviews kept, and specifications monitored within management of project to achieve required outcomes 3.4 Files, documents, images and footage relevant to specific projects are filed for future reference, with regard for client confidentiality
4 Manage multimedia process	4.1 Order of process procedure is determined and documented to deliver desired outcome 4.2 Costs are determined, checked with client and documented to deliver desired outcome 4.3 Quality outcomes are determined and documented, and quality system is established to monitor quality of product 4.4 Product is tested against specifications prior to client release 4.5 Endorsement of product by client is gained to ensure specifications have been fulfilled

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance	Description

	Criteria	
Reading	1.1, 1.3, 1.4, 2.1-2.3, 3.1-3.3, 4.4, 4.5	Interprets and evaluates technically specific textual information from a range of sources to identify and manage requirements
Writing	1.2, 1.3, 2.1, 2.2, 3.2, 3.3, 4.1-4.3	- Prepares required documentation for designing, managing and monitoring multimedia production using appropriate language and structure - Records accurate notes from discussions with clients
Oral Communication	3.1, 3.3, 4.2	- Delivers or seeks information using language and technical references suitable to audience - Uses listening and questioning techniques to confirm understanding
Numeracy	4.2	Uses mathematical skills to calculate production costs and budgetary constraints
Interact with others	1.5, 3.1, 3.3, 4.2, 4.5	Identifies the requirements of important communication exchanges, selecting appropriate communication methods and protocols to suit the purpose and audience
Get the work done	1.1-1.4, 2.1-2.3, 3.2-3.4, 4.1, 4.3-4.5	- Sequences and schedules complex activities, monitors implementation and manages relevant communication - Takes responsibility for planning, organising and implementing processes and systems to manage and protect project related information - Uses systematic, analytical processes to test and evaluate products against required outcomes - Uses features of digital systems and tools for multimedia production or management

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPDMT581 Manage multimedia production	ICPMM581C Manage multimedia production	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPDMT581 Manage multimedia production

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- manage multimedia production in TWO separate projects over at least a THREE month period and produce a portfolio that demonstrates:
 - how all components of the production cycle were monitored and managed
 - concepts used for multimedia integration
 - how content was sourced and managed
 - prototype sequences developed and their attributes
 - how product testing was undertaken
 - measures used to establish and maintain effective liaison with clients.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the typical management components of a production cycle
- identify factors to take into account when considering multimedia integration
- describe the steps involved in designing, building and testing a prototype
- define hypermedia and hypertext, and explain the similarities and differences between the two
- explain the difference between linear and interactive information structures
- explain how quality outcomes are determined
- identify appropriate methods for sourcing and storing content.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the digital media technologies field of work and include access to:

- resources, equipment and materials for multimedia production and management
- relevant workplace documentation
- case studies and, where possible, real situations.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPDMT582 Manage multimedia projects

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manage multimedia projects including research, client liaison, and budgetary and milestone considerations.

It applies to individuals who supervise others and have responsibility for a range of resources and outcomes.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Digital media technologies

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Develop project plan	1.1 Elements of project plan are identified according to principles of project management 1.2 Planning tools are identified for project 1.3 Time and budget factors are identified and incorporated into plan
2 Manage resources and time	2.1 Hardware resources relevant to specific multimedia tasks are identified, evaluated and incorporated to achieve required outcome 2.2 Time management is integrated into project planning and monitoring

ELEMENT	PERFORMANCE CRITERIA
	2.3 Human resources are incorporated and supported within project framework to achieve required outcome 2.4 Teamwork elements are identified and developed to achieve required outcome
3 Identify legal issues	3.1 Copyright principles and conventions relevant to digital data are identified and legal precedents noted 3.2 Copyright issues relating to multimedia authoring, digital imaging and digital sound are explained and strategies are devised to account for relevant contingencies 3.3 Copyright ownership of multimedia authoring, digital imaging and digital sound is established prior to commencing brief 3.4 Applications of law with reference to multimedia product warranties, software licences, consultants, sponsors and distribution are determined appropriate for job to be undertaken and relevant to industry sector
4 Manage research	4.1 Files, documents, images and footage relevant to project requirements are sourced and their functions documented and sequenced 4.2 Liaison with clients is undertaken, records of interviews kept and specifications monitored within management of project to achieve required outcomes 4.3 Files, documents, images and footage relevant to specific projects are filed for future reference with regard for client confidentiality
5 Determine and manage multimedia budgets	5.1 Estimation models of costs are identified and applied to range of multimedia products 5.2 Budget plans are established and checked against estimations to deliver accurate costings 5.3 Tendering processes and costs are determined and implemented to deliver required outcome within designated timeframes and available budgets 5.4 Project costs are determined, documented and monitored continuously to comply with business commitments and legal obligations 5.5 Business transactions are undertaken ethically and according to law 5.6 Multimedia project budget estimates and expenditure are contrasted and documented to assist in future business dealings

ELEMENT	PERFORMANCE CRITERIA
6 Manage project outcomes	6.1 Multimedia inputs are combined to form definitive master 6.2 Master product is duplicated and distributed according to client specifications 6.3 Project outcomes are refined to meet quality standards

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1-3.4, 4.1, 5.3, 5.5, 6.3	Interprets and compares complex information from a range of sources and extracts content relevant to purpose
Writing	1.1-1.3, 3.1, 4.2, 5.4, 5.6, 6.3	- Prepares required documentation for planning and monitoring projects using appropriate language and structure - Records accurate notes from discussions with clients for future reference
Oral Communication	3.2, 4.2	- Clearly explains requirements using language and technical references suitable to the audience - Uses listening and questioning techniques to confirm understanding
Numeracy	1.3, 2.2, 5.1-5.4, 5.6	- Uses mathematical skills to determine project budget and timelines for completion - Calculates costs including comparing and contrasting estimates
Navigate the world of work	3.1-3.4, 5.4, 5.5	Establishes and adheres to organisational, legal and regulatory obligations and responsibilities and passes on relevant requirement to others
Interact with others	3.2, 4.2, 6.2	Identifies the requirements of important communication exchanges, selecting appropriate communication methods and protocols to suit the purpose and audience
Get the work done	1.1-1.3, 2.1-2.4, 3.2, 4.1-4.3, 5.1-5.4, 6.1-6.3	- Sequences and schedules complex activities, monitors implementation and manages relevant communication - Takes responsibility for planning, organising and implementing processes and systems to manage,

		- monitor and protect project related information - Anticipates potential problems and has contingency plans ready for implementation - Uses features of digital systems and tools to manage multimedia products

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPDMT582 Manage multimedia projects	ICPMM582C Manage multimedia projects	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPDMT582 Manage multimedia projects

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- manage TWO separate multimedia projects from start-up to completion and produce a portfolio that demonstrates:
 - use of suitable tools to develop a project plan, monitor progress and deliver the project outcomes
 - how time and budget factors were managed
 - how legal requirements were identified and managed
 - how content was sourced and managed to ensure confidentiality and compliance with regulatory requirements
 - how resource requirements were identified, accessed and managed
 - how effective liaison with clients and the team was established and maintained.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list and describe typical elements of a multimedia project plan
- explain how time and budget factors are taken into account when planning and implementing a project
- identify resource requirements for a multimedia project and describe the role of each resource including:
 - hardware
 - software
 - human resources
- identify appropriate methods for sourcing and storing content

- explain methods for creating, duplicating and distributing a multimedia master
- list and describe legal or ethical considerations relevant to multimedia development including:
 - copyright issues relating to multimedia authoring and use of digital data, images and sound
 - product warranties
 - software licences
 - use of consultants or sponsors
 - distribution
- explain which estimation models might be used in multimedia production
- explain what is involved with tendering processes.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the digital media technologies field of work and include access to:

- resources, equipment and materials for managing a multimedia project
- relevant legislation, regulations, standards and codes
- relevant workplace documentation
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPINK211 Select and prepare materials for production

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare materials for ink and varnish manufacture.

It applies to individuals who typically work under supervision to ensure production requirements are met. Individuals identify and select materials and equipment and complete the preparation process according to defined procedures.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Ink manufacture

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Read and interpret job requirements and locate materials	1.1 Material requirements and quantities are correctly identified from documentation 1.2 Materials are located and checked according to enterprise procedures 1.3 Required quantities of material are confirmed and shortages and/or defective materials are reported and recorded
2 Prepare materials	2.1 Weighing and measuring devices are checked for accuracy and

ELEMENT	PERFORMANCE CRITERIA
	reset if required 2.2 Bowls, vats, tanks and pots are selected according to job specifications and checked to ensure they are free from contamination 2.3 Quantities of material are weighed or measured 2.4 Materials are prepared according to enterprise procedures 2.5 Quality checks are undertaken according to enterprise procedures 2.6 Materials are adjusted to conform to job specifications
3 Transfer prepared materials to production area	3.1 Prepared materials are stored, transferred or located according to enterprise and legislative requirements 3.2 Documentation is accurately completed according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.4	Establishes job requirements by interpreting information in relevant documentation
Writing	1.3, 3.2	Records information related to faulty materials and job outcomes in required enterprise format
Oral communication	1.3	Uses clear and specific language to report issues
Numeracy	1.1, 2.1, 2.3	- Identifies and calculates required quantities of materials - Checks and adjusts measuring devices for accuracy
Navigate the world of work	1.2, 2.4, 2.5, 3.1, 3.2	Complies with organisational policies and procedures relevant to own role
Get the work done	1.2, 1.3, 2.1, 2.2, 2.4, 2.6	- Follows clearly defined instructions and monitors own progress on tasks - Makes routine decisions relevant to the immediate task in accordance with job requirements

		• Responds to problems by referring to procedures and implementing required solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPINK211 Select and prepare materials for production	ICPIM211C Select and prepare materials for production	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPINK211 Select and prepare materials for production

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- locate, interpret and use information from various sources required to carry out tasks
- select, measure, prepare and store TWO batches of materials for use in the production of ink or chemicals, according to manufacturer's and job specifications and enterprise procedures
- complete required documentation for each batch of materials according to enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list relevant information sources and for each source briefly outline why it is needed
- summarise the health, safety and environmental considerations when completing ink production tasks including:
 - relevant enterprise procedures
 - potential hazards in the selection and preparation of materials for ink production
 - potential environmental issues when working with raw materials
 - safety equipment requirements
- specify the details needed for selection of materials for ink production
- briefly summarise the enterprise procedures for:
 - determining whether a material is defective
 - preparing materials and containers for ink production
 - recording the quantities and formulations
 - dealing with a shortage of materials

- approving prepared materials prior to commencement of production
- outline the checks needed during the preparation of materials required for ink production
- summarise the methods or procedures for checking accuracy and resetting measuring devices used in the work area including at least:
 - scales
 - flow meters
 - graduated vessels
- describe the purpose and correct use of equipment and machinery used to transfer materials to the preparation area.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the ink manufacture field of work and include access to:

- enterprise documents and policies and procedures
- raw materials, packaging materials, containers and consumables
- machines or equipment for weighing, measuring and moving materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPINK221 Blend chemicals

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to blend chemicals for ink and varnish manufacture.

It applies to individuals who typically perform routine tasks under direct supervision to ensure production requirements are met. Individuals identify process and job requirements, set up machinery or equipment and complete the blending process according to defined procedures.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Ink Manufacture

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Read and interpret job requirements and locate materials	1.1 Appropriate processes are identified and confirmed, and original is assessed to determine scanner settings 1.2 Appropriate chemicals, inks, materials and/or equipment are selected according to job specifications
2 Set up machines/equipment	2.1 Pre-startup checks are completed and documented according to enterprise procedures 2.2 Raw materials or feed lines are checked to ensure availability

ELEMENT	PERFORMANCE CRITERIA
	2.3 Machine and equipment operation is verified according to enterprise procedures
3 Maintain blending or homogenising process	3.1 Mix is completed according to enterprise procedures and work health and safety (WHS) requirements 3.2 Materials are added to process according to job specifications 3.3 Quality inspection and sampling is carried out according to enterprise procedures 3.4 Adjustments to mix or equipment are made to correct identified quality problems 3.5 Records, log or checklists are completed according to enterprise procedures
4 Shut down	4.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 4.2 Product or materials used in manufacture are removed from operating area where appropriate 4.3 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
5 Clean up	5.1 Equipment cleaning requirements are identified 5.2 Correct equipment or materials for manual or mechanical cleaning are selected 5.3 Cleaning is undertaken according to enterprise procedures and WHS requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 3.2	Establishes job requirements from job documentation or production control system
Writing	2.1, 3.5	- Records information related to job outcomes - Accurately completes records, logs and checklists

Numeracy	1.2, 3.1-3.4	- Measures and records quantities of materials - Checks measuring devices for accuracy and resets as required
Navigate the world of work	2.1, 2.3, 3.1, 3.3, 3.5, 4.1-4.3, 5.1, 5.3	Complies with legislative requirements and organisational policies and procedures relevant to own role
Get the work done	1.1, 1.2, 2.1, 2.2, 3.4, 5.1, 5.2	- Follows clearly defined instructions and monitors own progress on tasks - Makes routine decisions relevant to immediate task in accordance with job requirements - Responds to problems by referring to procedures and implementing required solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPINK221 Blend chemicals	ICPIM221C Blend chemicals	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPINK221 Blend chemicals

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- locate, interpret and use information from various sources to carry out tasks
- use a mixer disperser OR a bead mill OR an automatic ink dispensing system to blend TWO batches of chemicals OR tint TWO batches of ink intermediates or concentrates according to manufacturer's and job specifications, health and safety requirements and enterprise procedures including:
 - selecting, checking and setting up chemicals, ink, materials and equipment
 - carrying out quality checks during blending and making required adjustments
 - completing required records
 - cleaning and removal of waste.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list and briefly describe the purpose of each of the listed items used in the blending of chemicals for ink or varnish manufacture:
 - high and low speed dispersers
 - pan washer or scrubbers
 - pumps
 - valves
 - automatic ink dispensing system
 - homogeniser
 - de-ioniser
- identify potential hazards in the selection, preparation and clean up of materials and equipment for blending chemicals, including the correct use of safety equipment

- identify environmental issues that need to be considered when working with the range of materials used in chemical blending and tinting
- describe the enterprise procedures for:
 - preparing containers and equipment for blending and tinting
 - adding chemicals and constructing correct colours according to formulae
 - testing conductivity, viscosity and pH, where in-process testing is conducted
 - sampling and testing
 - a planned shutdown
- explain the purpose and process of:
 - homogenisation
 - de-ionising water when it is to be used in the blending process
 - batch coding systems
- outline the checks to be made when measuring chemicals for blending
- explain the factors that determine the position of the mixing head when blending
- list and describe problems that may occur in the tinting process and how these may be overcome.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the ink manufacture field of work and include access to:

- enterprise documents and policies and procedures
- materials and equipment used in the blending process
- cleaning chemicals, materials and equipment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPINK251 Filter and pack product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to filter and pack ink and varnish products.

It applies to individuals who typically perform routine tasks under direct supervision to ensure quality standards are maintained. Individuals identify and select equipment and materials for the job and complete tasks according to defined procedures.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Ink Manufacture

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Read and interpret job requirements from documentation	1.1 Product to be filtered is identified from job specifications 1.2 Type/size of packing container is identified from job specifications
2 Set up for filtering and packing	2.1 Filtering requirements are identified from job specifications 2.2 Correct filter is selected and fitted according to enterprise procedures 2.3 Appropriate packaging containers are identified and selected

ELEMENT	PERFORMANCE CRITERIA
	according to job specifications 2.4. Containers are checked to ensure they are free from contamination
3 Filter and pack product	3.1 Product is filtered according to enterprise procedures and work health and safety (WHS) requirements 3.2 Product is sampled and tested according to enterprise procedures 3.3 Correct amount of approved product is tinned off according to enterprise procedures 3.4 Container is correctly labelled according to enterprise procedures 3.5 Packed product is stored or despatched according to job specifications
4 Complete documentation	4.1 Documentation is completed according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1-2.3, 3.1-3.3, 3.5, 4.1	Establishes job requirements from documentation
Writing	3.4, 4.1	- Records required information on labels - Completes information related to job outcomes in required format
Numeracy	3.3	Uses basic mathematical processes to calculate and determine quantities of product
Navigate the world of work	2.2, 2.3, 3.1-3.4, 4.1	Complies with legislative requirements and organisational policies and procedures relevant to own role
Get the work done	1.1, 1.2, 2.1-2.4, 3.2, 3.5	- Follows clearly defined instructions and monitors own progress on tasks - Makes routine decisions relevant to the immediate task in accordance with job requirements - Responds to problems by referring to procedures and

		implementing required solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPINK251 Filter and pack product	ICPIM251C Filter and pack product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPINK251 Filter and pack product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0

Performance Evidence

Evidence of the ability to:

- find, interpret and use information required to carry out tasks from various information sources
- filter and pack ink/chemical products into TWO types of packaging container according to manufacturer's and job specifications, health and safety requirements and enterprise procedures including:
 - selecting, checking and fitting filters and containers
 - carrying out quality checks during the filtering process
 - labelling and storing (or despatching) containers
 - completing required records.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list relevant information sources and for each source briefly outline why it is needed
- describe potential health hazards involved in the filtering and packing of products
- list and briefly describe the enterprise policies and procedures for addressing health and environmental hazards
- explain the safety equipment used during filtering and packing, and the purpose of each item
- list and briefly describe the purpose of each of the listed used in the filtering and packing process:
 - pumps
 - filters

- weighing scales
- spatulas
- cardboard
- wax paper
- vacuum pack systems
- lifting/shifting devices
- describe the requirements for:
 - the selection of packaging and storage containers including pails, tins, drums and bins
 - the selection of filter(s)
 - checks to be made when fitting the filter
 - checking the quality of the product (viscosity, skin forming) throughout the filter/pack process
 - the weighing methods that are used in the work area
- outline problems and possible solutions for:
 - contaminants that can be present and how to eliminate these
 - extruding the product
- describe the enterprise systems and processes for:
 - sampling/testing
 - labelling and storing the packed product.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the ink manufacture field of work and include access to:

- enterprise documents and policies and procedures
- raw materials and consumables
- filters and packaging containers
- machines or equipment used to filter, pack and move materials or containers.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPINK331 Manufacture inks and coatings

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manufacture inks and coatings.

It applies to individuals who generally work under limited supervision to identify process and job requirements, set up machinery or equipment and complete the manufacturing process according to defined procedures. They also have some accountability for monitoring output and preventing or addressing production problems.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Ink manufacture

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Read and interpret job requirements from documentation	1.1 Appropriate processes are identified and confirmed 1.2 Appropriate materials and/or equipment are selected according to job specifications
2 Set up machines or equipment	2.1 Pre-startup checks are completed and documented according to enterprise procedures 2.2 Raw materials or feed lines are checked to ensure availability 2.3 Stirrer, mixer, pots and vats are checked to ensure they are free

ELEMENT	PERFORMANCE CRITERIA
	from contamination 2.4 Machine or equipment operation is verified according to enterprise procedures
3 Maintain blending process	3.1 Mix is completed in association with fellow workers according to enterprise procedures and work health and safety (WHS) requirements 3.2 Materials are added to the process according to job specifications 3.3 Quality inspection and sampling is carried out according to enterprise procedures 3.4 Adjustments to mix or equipment are made to correct identified quality problems
4 Maintain ink or coating milling process	4.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 4.2 Production is maintained according to WHS requirements and enterprise procedures 4.3 Milling process and equipment are monitored during batch manufacture to ensure operation is maintained 4.4 Machines or equipment are inspected and adjusted as required, and readouts are recorded and interpreted 4.5 Quality inspections and sampling are undertaken according to enterprise procedures 4.6 Records, log or checklists are completed according to enterprise procedures
5 Maintain operation of equipment or process conditions	5.1 Variations or irregularities of equipment operation or process conditions are identified and reported 5.2 Production difficulties are anticipated and action is taken to prevent occurrence by timely intervention according to enterprise procedures 5.3 Corrective action is documented and reported according to enterprise procedures
6 Shut down liquid ink or coating blend or milling process	6.1 Pre-shutdown checks are carried out and documented according to enterprise procedures 6.2 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 6.3 Shutdown is conducted in association with fellow workers and in

ELEMENT	PERFORMANCE CRITERIA
	compliance with WHS requirements 6.4 Product or materials used in manufacture are removed from operating area where appropriate 6.5 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
7 Clean up	7.1 Equipment cleaning requirements are identified 7.2 Correct equipment or materials for manual or mechanical cleaning are selected 7.3 Cleaning is undertaken according to enterprise procedures and WHS requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 3.2, 6.2	Identifies and interprets information from job and manufacturer's specifications and enterprise procedures
Writing	1.1, 2.1, 4.6, 5.1, 5.3, 6.1	Documents actions and outcomes in accordance with enterprise procedures
Oral communication	5.1, 5.3	Provides information regarding issues encountered and actions undertaken
Numeracy	3.2, 4.4	- Measures and records quantities of materials - Checks machine readouts and measuring devices for accuracy and resets as required
Navigate the world of work	2.1, 2.4, 3.1, 3.3, 4.1, 4.2, 4.5, 4.6, 5.2, 5.3, 6.1-6.5, 7.3	Complies with legislative requirements and organisational policies and procedures relevant to own role
Interact with others	3.1, 4.1, 6.3	Cooperates with others as part of familiar routine activities and contributes to specific activities requiring joint responsibility
Get the work done	1.1, 1.2, 2.1-2.3, 3.4, 4.1, 4.3, 4.4, 5.2,	- Follows clearly defined instructions and monitors own progress on tasks - Implements standard procedures when required to

	7.1, 7.2	- make routine decisions relevant to immediate tasks - Initiates standard procedures when responding to anticipated or actual problems directly related to own role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPINK331 Manufacture inks and coatings	ICPIM331C Manufacture inks and coatings	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPINK331 Manufacture inks and coatings

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- find, interpret and use information from various sources to carry out tasks according to requirements
- use a mixer disperser and EITHER a bead mill OR a three-roll mill to manufacture TWO batches of ink or coating according to manufacturer's and job specifications, health and safety requirements and enterprise procedures including:
 - selecting, checking and setting up chemicals, ink, materials and equipment
 - carrying out quality checks during blending and making required adjustments to process or equipment
 - completing required records
 - shutting down equipment
 - cleaning and removal of waste.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify and briefly describe the enterprise procedures for:
 - using the batch coding system in the work area
 - potting off the mill
 - labelling ink containers
- identify health and safety requirements and environmental issues in relation to:
 - adding powders during the mixing stage of ink manufacture
 - cleaning bowls, vats and pots
 - the manufacture of ink or coating

- the fitting and use of safety equipment
- specify the checks, tests and/or monitoring required during the process including:
 - when preparing containers and equipment for ink or coating manufacture
 - when measuring raw materials for ink production
 - at each stage of the ink or coating manufacture process
 - how the grind of the ink is determined
 - the ink texture and viscosity during the milling process
- explain the technical aspects of the ink or coating manufacturing process including:
 - the purpose of using low speed early in the mixing process
 - the function of antioxidants in the mixing process
 - the factors that determine the position of the mixing head
 - the action taken when the mixture has a skin on it
 - the particular requirements for coating manufacture
 - the characteristics of the end product of the mixing phase of ink manufacture
 - the purpose of and ideal conditions for milling ink
 - the adjustment of the mill for low or high grind values.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the ink manufacture field of work and include access to:

- enterprise documents and procedures
- raw materials and consumables
- machines and equipment
- cleaning chemicals.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPINK335 Manufacture varnish and resin

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manufacture varnishes and resins.

It applies to individuals who generally work under limited supervision to identify process and job requirements, set up machinery or equipment and complete the manufacturing process according to defined procedures. They also have some accountability for monitoring output and preventing or addressing production problems.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Ink manufacture

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Read and interpret job requirements from documentation	1.1 Appropriate processes are identified and confirmed 1.2 Appropriate materials and/or equipment are selected according to job specifications
2 Startup machines or equipment	2.1 Pre-startup checks are completed and documented according to enterprise procedures 2.2 Utilities are checked 2.3 Raw materials or feed lines are checked to ensure availability

ELEMENT	PERFORMANCE CRITERIA
	2.4 Pre-startup conditions are reported according to enterprise procedures 2.5 Startup is conducted according to enterprise procedures 2.6 Machine or equipment operation is verified according to enterprise procedures
3 Maintain varnish/resin production process	3.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.2 Production is maintained according to work health and safety (WHS) requirements and enterprise procedures 3.3 Process and equipment are monitored during batch manufacture to ensure operation is maintained 3.4 Records, log or checklists are completed according to enterprise procedures 3.5 Machines or equipment are inspected and readouts recorded and interpreted 3.6 Quality inspections and sampling are undertaken according to enterprise procedures 3.7 Consumables are monitored and added to the process according to job specifications
4 Maintain operation of equipment/process conditions	4.1 Variations or irregularities of equipment operation or process conditions are identified and reported 4.2 Production difficulties are anticipated and action is taken to prevent occurrence by timely intervention according to enterprise procedures 4.3 Corrective action is documented and reported according to enterprise procedures
5 Shut down varnish or resin manufacture process	5.1 Pre-shutdown checks are carried out and documented according to enterprise procedures 5.2 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.3 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.4 Product or materials used in manufacture are removed from operating area where appropriate 5.5 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory

ELEMENT	PERFORMANCE CRITERIA
	requirements and enterprise procedures
6 Clean up	6.1 Equipment cleaning requirements are identified 6.2 Correct equipment or materials for manual or mechanical cleaning are selected 6.3 Cleaning is undertaken according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 2.5, 2.6, 3.1, 3.2, 3.4-3.7, 4.3, 5.1-5.3, 5.5, 6.3	Identifies and interprets information from job and manufacturer's specifications and enterprise procedures
Writing	2.1, 2.4, 3.4, 3.5, 4.1, 4.3, 5.1	Documents actions and outcomes in accordance with enterprise procedures
Oral communication	1.1, 2.4, 3.1, 4.1, 4.3, 5.3	Provides information regarding issues encountered and actions undertaken
Navigate the world of work	2.1, 2.4-2.6, 3.1, 3.2, 3.6, 4.2, 4.3, 5.1-5.5, 6.3	Complies with legislative requirements and organisational policies and procedures relevant to own role
Interact with others	3.1, 5.3	Cooperates with others as part of familiar routine activities and contributes to specific activities requiring joint responsibility
Get the work done	1.1, 1.2, 2.2, 2.3, 3.1, 3.3, 3.7, 4.1, 4.2, 5.1, 6.1, 6.2	- Follows clearly defined instructions and monitors own progress on tasks - Implements standard procedures when required to make routine decisions relevant to immediate tasks - Initiates standard procedures when responding to anticipated or actual problems directly related to own role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPINK335 Manufacture varnish and resin	ICPIM335C Manufacture varnish and resin	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPINK335 Manufacture varnish and resin

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- find, interpret and use information from various sources to carry out tasks according to requirements
- manufacture TWO batches of varnish or resin to specifications, using EITHER fusion cooking OR reaction, including in-process testing according to manufacturer's and job specifications, health and safety requirements and enterprise procedures including:
 - selecting and checking materials and equipment prior to processing
 - carrying out quality checks during processing and making required adjustments to process or equipment
 - completing required records
 - shutting down equipment
 - cleaning of equipment and removal of product and waste
- complete a planned shutdown.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify the name and location of the enterprise document that contains information about:
 - batch coding system used in the work area
 - system for labelling containers
 - system for disposal of waste
- identify health and safety requirements and environmental issues in relation to:
 - production of varnish or resin
 - manual handling issues that arise in the manufacture of varnish or resin

- safety equipment that is required and how to check when fitting and using
- chemicals used in the clean-up stage of the process
- specify the checks, tests and/or monitoring required during all stages of the process including:
 - when measuring materials
 - when preparing for filtration
 - pre-startup checks that are required for TWO processes in varnish or resin manufacture
 - procedures for adding liquids or solids to a varnish or resin mix
 - quality checks that are required during the filtration process
- explain the technical aspects of the varnish or resin manufacture process including:
 - equipment that is required for the manufacture of varnish or resin
 - properties that ink gains from the two basic components of varnish, resins and solvents
 - characteristics and end use of gelled and non-gelled varnishes
 - ideal conditions for filtration of varnish or resin product
 - effect that water contamination has on the manufacture of varnish or resin and what steps should be taken to avoid it
 - methods that are available for testing viscosity of varnish or resin
 - manner in which the viscosity of a batch of varnish or resin is increased
 - actions required if the viscosity is too low
 - procedures for recording details about the formulations, and in-process testing where required
- outline inspections and monitoring that is carried out during varnish or resin production.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the ink manufacture field of work and include access to:

- enterprise documents and procedures
- raw materials and consumables
- machines and equipment
- cleaning chemicals.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPKNW322 Develop knowledge of the printing and graphic arts industry

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 2.0.

Application

This unit describes the skills and knowledge required to work in or deal with individuals in various sectors of the printing and graphic arts industry.

It applies to individuals who require detailed technical knowledge in particular areas of the industry, together with a working knowledge of related areas. Individuals need the skills to facilitate technical communication and to work as a member of a team.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Holistic knowledge

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Apply knowledge of the printing industry	1.1 Printing industry terminology and vocabulary are used correctly and accurately 1.2 New technology and new work processes are monitored and implemented when required 1.3 Trends within the printing industry are monitored, on an ongoing basis, to inform personal work practices 1.4 Basic principles and obligations of legislative, standards and

ELEMENT	PERFORMANCE CRITERIA
	industrial awards are researched and followed within the workplace and in personal work practices
2. Acquire knowledge of the graphic pre-press, graphic design and multi-channel communications sector	2.1 Principles behind pre-press functions such as image production, image combining, image output and workflow are researched 2.2 Different types of images are assessed to identify the most appropriate usage 2.3 Different types of output are researched and their effects on final product are evaluated 2.4 Different output devices are researched to identify appropriate usage 2.5 Differences between various markup and scripting languages and their application are assessed to identify most appropriate usage 2.6 Platforms and computer systems requirements for different products are researched and their effects on final product are evaluated
3. Acquire knowledge of printing machining sector	3.1 Basic principles of printing processes (lithography, relief, flexography, gravure, pad printing, screen printing, digital and electronic printing) are researched 3.2 Types of products and processes are researched to identify appropriate usage 3.3 Capabilities and limitations of each process are reviewed
4. Acquire knowledge and requirements of the converting, binding and finishing sector	4.1 Basic characteristics of converting and finishing processes (guillotining, flat-bed and rotary cutting, collating, folding, adhesive, mechanical and thermal fastening) are researched 4.2 Types of processes are researched to identify appropriate usage 4.3 Capabilities and limitations of each process are reviewed
5. Acquire knowledge and requirements of the ink manufacturing sector	5.1 The ink manufacturing sector, its products, services and supplier profile are identified 5.2 Enterprise products and services, their characteristics and their end use, specifically with regard to printing industry, are identified 5.3 Printing processes and their implication for ink manufacture are researched 5.4 Manufacturing processes and quality control procedures for

ELEMENT	PERFORMANCE CRITERIA
	ink, coating, varnish, resin, or chemical production are identified
6. Acquire knowledge and requirements of mail house operations	6.1 Australia Post Standards and weight and size limitations are researched 6.2 Equipment used in mail house operations is researched 6.3 Computer driven bar code, sorting, tagging and reading systems are researched to identify appropriate usage 6.4 Data management and processing systems and software are researched to identify appropriate usage 6.5 Computerised document management, design and reading systems and software are researched to identify appropriate usage 6.6 Computerised market research, listing services and associated software are researched to identify appropriate usage
7. Acquire knowledge of colour theory	7.1 Colour theory of additive colours (light), Red, Green, Blue (RGB), is researched to inform pre-press and/or design decisions 7.2 Colour theory of subtractive colours (pigments), Cyan, Magenta, Yellow, Key (black) (CMYK), is researched to inform pre-press and/or design decisions 7.3 Relationship between ranges of visual colour RGB and CMYK is researched to inform pre-press and/or design decisions 7.4 Relationship between hue, greyness and substrate for tone and colour correction is researched to inform pre-press and/or design decisions 7.5 Colour matching conditions and colour matching systems are researched to inform pre-press and/or design decisions
8. Apply knowledge of substrates and consumables	8.1 Range of substrates used for each printing process is researched 8.2 Relationship of different substrate sizes is researched to identify appropriate usage 8.3 Effects of different weights and callipers of substrates on pre-press, printing and finishing operations are researched 8.4 Effects of substrate on pre-press, printing and finishing operations are researched 8.5 Effects of different properties of ink (drying properties, fastness, gloss) on pre-press, printing and finishing operations are researched 8.6 Suitability of inks and coatings for particular finishing processes is identified

ELEMENT	PERFORMANCE CRITERIA
9. Acquire basic knowledge of costs of production	9.1 Main cost elements (fixed, capital, variable) in production are identified 9.2 Information required to accurately cost particular jobs is determined 9.3 Ways of minimising use of materials without affecting quality of output are identified 9.4 Ways of maximising efficiency of resources without affecting quality of output are identified
10. Acquire basic knowledge of production management requirements and systems	10.1 Types of information that need to be exchanged between different stages of production to facilitate production efficiency are identified 10.2 Systems and strategies to exchange identified information are researched 10.3 Basic principles of efficient production management are identified 10.4 Principles of effective quality management are identified

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.3, 1.4, 2.1, 2.3, 2.4- 2.6, 3.1-3.3, 4.1- 4.3, 5.1- 5.4, 6.1-6.6, 7.1-7.6, 8.1-8.6, 9.1-9.4, 10.1-10.4	Researches, comprehends and applies information extracted from various sources
Writing	1.1`	Uses appropriate vocabulary, including technical language, in written documents prepared for a range of audiences
Oral Communication	1.1	Uses appropriate vocabulary, including technical language, to interact with others
Numeracy	5.3, 8.3, 9.1, 9.2,	Uses mathematical techniques to estimate quantities, usage and costs

	9.3, 9.4	Interprets and analyses mathematical information included in texts
Navigate the world of work	1.2-1.4, 5.4, 6.1	- Maintains knowledge of the printing industry required for current role - Understands and adheres to relevant industry standards, legislative requirements and organisational policies and procedures
Get the work done	1.2, 1.3, 2.1-2.6, 3.1-3.3, 4.1-4.3, 5.1-5.4, 6.2-6.6, 7.1-7.5, 8.1-8.6, 9.2-9.4, 10.1-10.4	- Plans, organises and implements systems and activities to achieve efficient and effective outcomes - Analyses and evaluates information to solve problems and make decisions - Monitors trends and identifies concepts, principles and features of approaches for use in new contexts - Understands and uses digital technologies to access, organise, store and share information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPKNW322 Develop knowledge of the printing and graphic arts industry	ICPKN311 Apply knowledge of the graphic pre-press sector	11 units merged into 1 due to duplication of information	Equivalent unit
	ICPKNW312 Apply knowledge of printing machining	11 units merged into 1 due to duplication of information	Equivalent unit
	ICPKNW313 Apply knowledge and requirements of the converting, binding and finishing sector	11 units merged into 1 due to duplication of information	Equivalent unit
	ICPKNW314 Apply knowledge and requirements of the screen printing sector	11 units merged into 1 due to duplication of information	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
	ICPKNW315 Apply knowledge and requirements of the multimedia sector	11 units merged into 1 due to duplication of information	Equivalent unit
	ICPKNW316 Apply knowledge and requirements of paper and printing processes	11 units merged into 1 due to duplication of information	Equivalent unit
	ICPKNW317 Apply knowledge and requirements of the ink manufacturing sector	11 units merged into 1 due to duplication of information	Equivalent unit
	ICPKNW318 Apply knowledge and requirements of mail house operations	11 units merged into 1 due to duplication of information	Equivalent unit
	ICPKNW319 Apply knowledge and processes of converting paper-based products	11 units merged into 1 due to duplication of information	Equivalent unit
	ICPKNW320 Apply knowledge and requirements of information technology systems in the printing industry	11 units merged into 1 due to duplication of information	Equivalent unit
	ICPKNW321 Apply knowledge and requirements of digital production	11 units merged into 1 due to duplication of information	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPKNW322 Develop knowledge of the printing and graphic arts industry

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 2.0.

Performance Evidence

Evidence of the ability to:

- use appropriate vocabulary and terminology in written and oral communications with tradespeople, colleagues, management or clients
- document current with trends in the printing industry
- apply relevant legislative and workplace requirements when completing tasks
- conduct research to determine image type, output settings, output requirements and output devices for different jobs
- conduct research to determine the correct process for a print job
- conduct research to determine the correct process for a converting or finishing job
- use a colour management system to determine colour requirements for a print job
- conduct research to determine appropriate substrate and ink for different print jobs
- accurately plan, cost and document a print job.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe legislative and enterprise requirements that affect work practice
- describe the basic principles behind the following pre-press functions:
 - image production (typesetting, scanning, graphic arts camera)
 - image combining (manual and electronic)
 - image output (film, plates, direct to press)
- describe the basic principles of the following printing processes:
 - lithography
 - relief

- flexography
- gravure
- pad printing
- screen printing
- digital and electronic printing
- describe the range of substrates used for each printing process
- describe designs that are appropriate for different printing processes
- describe the basic characteristics of the following converting and finishing processes:
 - guillotining
 - flat-bed and rotary cutting
 - collating
 - folding
 - adhesive
 - mechanical and thermal fastening
- describe the relationship between ranges of visual colour Red, Green, Blue (RGB) and Cyan, Magenta, Yellow, Key (black) (CMYK)
- explain the main cost elements in printing production
- explain the basic principles of efficient production management.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing industry and include access to:

- industry-standard technology, equipment and materials
- sources of information.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN211 Mount and proof flexographic plates for basic printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare and mount flexographic plates and plate cylinders for routine printing including proofing plates and checking cylinders for registration.

It applies to individuals who work under direct supervision and perform a range of routine printing tasks in a defined context. The practical skills and operational knowledge required to perform these tasks is at a fundamental level.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm routine job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is carried out correctly in minimum time with minimum wastage 1.3 Prior inspections are completed and signed off

ELEMENT	PERFORMANCE CRITERIA
2. Prepare flexographic plates	2.1 Plate height and relief are measured 2.2 Plates are trimmed and prepared according to mounting system requirements 2.3 Mounting adhesive is selected to achieve correct pitch circle diameter (PCD) of specified plate cylinders and gears
3. Prepare plate cylinders	3.1 Plate cylinders/seamless sleeves are selected, cleaned and prepared 3.2 Sleeves and correct gears on mandrels are selected, cleaned, prepared and mounted to meet routine job specifications 3.3 Total indicated run-out (TIR) is checked as within specified tolerances on plate cylinders 3.4 Selected mounting adhesive is applied to plate cylinders
4. Mount and proof flexographic plates on mounting/proofing machine	4.1 Plates are prepared and mounted on cylinders using pin mount or microdot systems or sleeves according to chart number/print direction 4.2 Plate mounting sheet is prepared to meet routine job specifications 4.3 Plates are mounted to position on plate mounting sheet or camera targets 4.4 Plate mounting sheet is installed and tensioned onto plate cylinder to specified chart number/print direction 4.5 Plates are proofed and each plate cylinder is checked for register 4.6 Flexographic plates are trimmed and taped down according to printing press requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.2, 3.2, 3.3, 4.2, 4.4	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications

Writing	1.3	Completes workplace forms accurately
Oral Communication	1.1, 1.3, 3.2, 3.3, 4.2, 4.4, 4.6	Participates effectively in spoken interactions by using strategies to confirm, clarify or repair understanding
Numeracy	2.1	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1-1.3, 2.2, 2.3, 3.1-3.3, 4.1, 4.2, 4.4, 4.6	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Complies with legislative requirements, and follows organisational policies and procedures relevant to own role
Interact with others	1.1, 3.2, 3.3, 4.2, 4.4, 4.6	Seeks to cooperate with others to achieve results in immediate work context
Get the work done	1.2, 2.2, 2.3, 3.1, 3.2, 3.4, 4.1-4.6	- With assistance, determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment - Reads data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN211 Mount and proof flexographic plates for basic printing	ICPPR211C Mount and proof flexographic plates for basic printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN211 Mount and proof flexographic plates for basic printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare flexographic plates and plate cylinders on TWO occasions for basic jobs and mount these according to the selected mounting system (as specified on job documentation or production control system) according to enterprise procedures (mounting can be on either proofing machine or printing press)
- proof plates and check plate cylinder registration of the flexographic plates mounted on the proofing machine for this purpose on TWO occasions for basic jobs
- find and use information relevant to the task from a variety of information sources
- safely operate tools and machinery (such as safely switching off machinery before cleaning is started and using of any cleaning chemicals safely).

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- determine job requirements
- identify vital information on the job ticket
- list checks to be done prior to set up (availability of materials etc.)
- identify flexographic printing plates and mounting systems
- identify health and safety concerns for safely mounting and proofing plates
- identify how to ensure the correct plates for the job is chosen
- describe when cushion type mounting material is used
- identify how to handle plates when mounting to avoid damage to plates
- list options to seal edges of plates when mounting
- explain importance of measuring plate height
- identify TIR (total indicated run-out) effect on press performance

- define and describe procedure for V-block mounting
- proofing and adjustment
- identify quality control measurements to apply to the proof to test against known standards
- identify checks to be made on initial print prior to running
- identify how to minimise registration errors

Information sources

- identify relevant information sources (including machine manuals, safety documentation and other information) relevant to this task and their location and the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- flexographic printing machine
- mounting systems
- print direction chart.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN214 Produce basic flexographic printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely operate either a reel- or sheet-fed flexographic print, ensuring efficient production flow and quality standards.

It applies to individuals working in the printing and graphic arts industry who perform a range of mainly routine tasks, work under direct supervision and use limited practical skills and knowledge in a defined context.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain operation of delivery systems	1.1 Delivery systems are monitored and adjusted to ensure efficient and continuous operation and ensure no damage to finished product 1.2 Substrate is added to and removed from process according to job instructions
2. Maintain basic flexographic printing	2.1 Flexographic plate and plate cylinder or sleeve condition is monitored and adjusted to ensure quality of printed product meets

ELEMENT	PERFORMANCE CRITERIA
process	the approved proof standard 2.2 Flexographic impression roller condition is monitored to ensure quality of printed product meets the approved proof standard 2.3 Flexographic inking system and doctor blade are monitored and adjusted to ensure quality of printed product meets the approved proof standard 2.4 Drying systems are monitored and adjusted to ensure quality of printed product meets the approved proof standard 2.5 Basic in-line printing/converting/binding/finishing process(es) are monitored and adjusted to ensure quality of printed product meets the approved proof standard
3. Maintain routine production process	3.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.2 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 3.3 Manual and/or automatic control is used according to job specifications 3.4 Performance is monitored and verified using the process control system according to enterprise procedures 3.5 Ink performance, colour, register and position of print are monitored and adjusted throughout production run 3.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.7 Faulty performance of equipment is identified and reported according to enterprise procedures 3.8 Waste is sorted according to enterprise procedures
4. Identify and rectify faults	4.1 Problem in flexographic machine operation is identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to specified procedures and consistent with operator's skill level 4.3 Flexographic machine operation is checked to ensure efficient operation 4.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Reels and cores are removed from press if web-fed 5.4 Unused ink is drained back into containers and correctly labelled and stored according to manufacturer's/supplier's specifications and enterprise procedures 5.5 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.6 Product is removed from operating area
6. Clean and wash printing machine	6.1 Cylinders or sleeves, plate and roller surfaces are cleaned ready for next run 6.2 Inking rollers and doctor blades or chamber blade systems are cleaned with correct solvents according to WHS guidelines 6.3 Ink pumps, tanks and hoses are cleaned correctly 6.4 Impression rollers/central impression and press rollers are cleaned 6.5 In-line printing/converting/binding/finishing units are cleaned ready for next run 6.6 Reel or sheet-feed transportation and delivery systems are disengaged and cleaned ready for next run 6.7 Press is lubricated and protected according to duration of shutdown 6.8 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	3.2, 3.3, 4.2, 5.1, 5.4	Recognises and interprets text to establish job requirements from information contained within

		relevant procedures and specifications
Writing	3.7, 4.1, 4.4, 6.8	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.1-3.3, 3.7, 4.1, 4.2, 4.4, 5.1, 5.2, 5.4	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	1.2,	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	2.1-2.5, 3.1-3.4, 3.7, 3.8, 4.1-4.4, 5.1, 5.2, 5.4, 5.5, 6.1-6.8	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment incorporating regulatory requirements and enterprise procedures
Interact with others	3.1-3.3, 3.7, 4.1, 4.2, 4.4, 5.1, 5.2, 5.4	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.5, 2.1-2.5, 3.1, 3.4-3.8, 4.1-4.4, 5.1-5.6, 6.1-6.7	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel OR - sheet
Monitoring and adjusting MUST include EITHER:	- reel stand and rewind sections - web control system - sheeting action

	• set off / marking prevention system OR • feeder and delivery system • sheet pick-up and transportation system • transfer system

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN214 Produce basic flexographic printed product	ICPPR214C Produce basic flexographic printed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN214 Produce basic flexographic printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- accurately produce TWO basic flexographic printing jobs (if possible including at least ONE in-line process) according to job specifications, enterprise procedures and work health and safety (WHS) requirements
- correctly shut down and clean flexographic press and, if possible, rectify any production problems with minimum downtime.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline process for transportation and delivery
- describe process for determining the substrate printing side

For reel systems only

- outline WHS concerns when loading and handling heavy reels
- describe effect on the print of excessive tension on the unwinding reel
- describe process for correct web splicing and implications if web is not spliced correctly

For sheet systems only

- outline WHS concerns when operating sheet transportation and delivery systems
- identify reasons for fanning sheets before loading into the press
- describe the process for setting, and the check to be made to the double sheet detector during the print run, and components that can be adjusted to ensure correct delivery
- describe effect excessive suction can have on slow-down wheels

- state how often product quality should be assessed, and what action taken if print fills in when printing
- describe effect of dirt under the doctor blade on the print and the motion of doctor blade oscillation
- describe action taken if ink in duct is foaming
- name signs of wear in the plate image area
- outline WHS concerns for the in-line component of the press and how often in-line components of the job should be examined
- describe the process of monitoring to ensure quality
- outline precautions to ensure the rewound product is consistent, acceptable quality and how to identify if printed material is not of an acceptable standard
- outline marking of product deemed unacceptable by the operator
- describe the process of consultation needed when there is a problem with the print that cannot be fixed by the operator
- identify location of information concerning correct operation of the machine
- outline dangers from solvents and solutions used to clean the inking system, plate and press
- describe methods used to ensure proper storage of plates following printing
- list parts of the machine that should be thoroughly cleaned following the print run and components to be inspected for wear following the print run
- identify records important for following or repeat prints
- identify machine manuals and safety documentation relevant to this task, where they are kept, and information included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- a reel or sheet-fed flexographic press.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN222 Produce basic gravure printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce routine gravure printed product. This requires operation of a gravure press in a way that supports efficient production flow while maintaining product quality standards. It includes requirements applicable to routine operation, shut down and cleaning.

It applies to individuals who work under direct supervision and perform a range of routine printing tasks in a defined context.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain routine operation of reel system	1.1 Reel stand and rewind section are monitored and adjusted to ensure efficient continuous operation and maintain correct tension, without marks, blemishes or damage to finished product 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation 1.3 Substrate is added to and removed from process according to

ELEMENT	PERFORMANCE CRITERIA
	job instructions 1.4 Sheeting section is monitored and adjusted to ensure quality and efficient product delivery 1.5 Set-off / marking prevention system is monitored and adjusted to ensure quality of printed product, without set-off or marking, meeting the approved proof standard
2. Maintain basic gravure printing process	2.1 Gravure cylinder condition is monitored and adjusted to ensure quality of printed product meets the approved proof standard 2.2 Gravure impression roller condition is monitored and maintained to ensure quality of printed product meets the approved proof standard 2.3 Gravure inking system and doctor blade are monitored and adjusted to ensure quality of printed product meets the approved proof standard 2.4 Drying systems are monitored and adjusted to ensure quality of printed product meets the approved proof standard 2.5 Basic in-line printing/converting/binding/finishing process(es) are monitored and adjusted to ensure quality of product meets the approved proof standard
3. Maintain routine production process	3.1 Production process is operated in association with fellow workers and according to company specifications and planned daily schedule 3.2 Production is maintained within work health and safety (WHS) requirements and company and manufacturer's specifications 3.3 Manual and/or automatic control is used as per specification 3.4 Performance is monitored and verified using the process control system according to enterprise procedures 3.5 Ink performance, colour, register and position of print are monitored and adjusted throughout production run 3.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.7 Process adjustments to eliminate problems are reported according to enterprise procedures 3.8 Waste is sorted according to enterprise procedures
4. Identify and rectify faults	4.1 Problems in gravure machine operation are identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to

ELEMENT	PERFORMANCE CRITERIA
	specified procedures and consistent with operator's skill level 4.3 Gravure machine operation is checked to ensure correct operation 4.4 Faulty performance of equipment is identified and reported according to enterprise procedures
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Unused ink is correctly labelled and stored according to manufacturer/supplier specifications and enterprise procedures 5.4 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.5 All product is removed from operating area 5.6 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 5.7 Repair/adjustment is verified prior to resumption of operations
6. Clean and wash up printing machine at end of print run	6.1 Cylinders and roller surfaces are cleaned ready for next run 6.2 Inking system is washed up ready for next run, and liquid waste is disposed of according to company and regulatory requirements 6.3 In-line printing/converting/binding/finishing units are cleaned ready for next run 6.4 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run 6.5 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance	Description

	Criteria	
Reading	1.2, 3.2, 3.3, 4.2, 5.1, 5.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.7, 4.1, 4.4, 5.6, 6.5	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.1-3.3, 3.7, 4.1, 4.2, 4.4, 5.1-5.6	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Navigate the world of work	1.1-1.5, 2.1-2.5, 3.1-3.4, 3.7, 3.8, 4.1-4.4, 5.1-5.4, 5.6, 6.1-6.5	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment Incorporating regulatory requirements and enterprise procedures
Interact with others	3.1-3.3, 3.7, 4.1, 4.2, 4.4, 5.1-5.3, 5.6	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how in routine work situations
Get the work done	1.1-1.5, 2.1-2.5, 3.1, 3.4-3.8, 4.1-4.4, 5.1-5.7, 6.1-6.4	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN222 Produce basic gravure printed product	ICPPR222C Produce basic gravure printed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN222 Produce basic gravure printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely operate a gravure press consistent with efficient routine production flow that maintains product quality standards; ensuring any production problems are rectified with minimum downtime
- correctly shutdown production process and clean and wash printing machine according to work health and safety (WHS) guidelines
- demonstrate use of control, monitoring and data entry systems
- find and use information relevant to the task from a variety of information sources
- produce TWO basic gravure printing jobs (if possible including at least one in-line process) according to job specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Reel transportation and delivery

- identify WHS concerns applicable to loading and handling heavy reels
- identify how to determine printing side of the substrate
- describe effect on the print of excessive tension on the unwinding reel
- identify implication if the web is not spliced correctly

Gravure printing operations

- identify how frequently product quality should be assessed
- identify appropriate action/s if print is filling in when printing
- describe effect of dirt under the doctor blade has on the print and the cylinder
- identify importance of oscillation of the doctor blade

- describe how to address a nick in the doctor blade
- identify appropriate action/s if ink in the duct is foaming
- describe how to identify signs of wear in the plate image area
- identify level ink should be maintained at

In-line processes

- identify WHS concerns for in-line component of the press
- identify how often in-line components of the job should be examined

Quality control and problem-solving

- identify what needs to be monitored to ensure quality
- identify precautions required to ensure the rewound product is of consistent, acceptable quality
- describe how to identify printed material below acceptable standard
- identify how to mark product deemed unacceptable by the operator
- identify the appropriate person to consult if the operator is unable to fix a problem with the print

Shut down and wash up the press

- identify dangers from solvents and solutions used to clean the inking system, plate and press
- identify methods used to ensure proper storage of plates following printing
- list parts of the machine to be thoroughly cleaned following the print run
- list components to be inspected for wear following the print run
- describe record keeping requirements important for following or repeat prints

Information sources

- identify relevant information sources (including machine manuals, safety documentation and other information) relevant to these tasks including where they are located and what they cover.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- gravure printing machine with in-line processes
- industry software packages
- special purpose tools, equipment and materials

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN232 Produce basic lithographic printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce basic lithographic printing, including small offset product. This requires operation of a lithographic press in a way that supports efficient routine production flow while maintaining product quality standards. It includes requirements related to shutdown and cleaning of the printing press.

It applies to individuals who work under direct supervision and perform a range of routine printing tasks in a defined context. The practical skills and operational knowledge required to perform these tasks is at a fundamental level.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain routine operation of delivery systems	1.1 Delivery systems are monitored and adjusted to ensure efficient and continuous operation and ensure finished product is undamaged 1.2 Substrate is added and removed from process according to job instructions
2. Maintain basic routine	2.1 Lithographic plate and plate cylinder condition is monitored

ELEMENT	PERFORMANCE CRITERIA
lithographic printing process	and adjusted to ensure quality of printed product meets the approved proof standard 2.2 Lithographic blanket and blanket cylinder condition is monitored and adjusted to ensure quality of printed product meets the approved proof standard 2.3 Lithographic impression cylinder condition is monitored and adjusted to ensure quality of printed product meets the approved proof standard 2.4 Lithographic inking condition is checked and maintained to ensure quality of printed product meets the approved proof standard 2.5 Lithographic dampening system condition is monitored and adjusted to ensure quality of printed product meets the approved proof standard
3. Maintain routine production process	3.1 Production process is operated in association with fellow workers and according to company specifications and planned daily schedule 3.2 Production is maintained within work health and safety (WHS) requirements and company and manufacturer's specifications 3.3 Manual and/or automatic control is used as per specification 3.4 Performance is monitored and verified according to enterprise procedures 3.5 Ink performance, colour, register and position of print are monitored, adjusted and maintained throughout production run 3.6 Faulty performance of equipment is identified and reported according to enterprise procedures 3.7 Waste is sorted according to enterprise procedures
4. Rectify minor lithographic machine faults	4.1 Adjustments or corrections are carried out according to specified procedures and consistent with operator's skill level 4.2 Problems with lithographic machine operation are identified and reported according to enterprise procedures 4.3 Lithographic machine operation is checked to ensure correct operation
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements

ELEMENT	PERFORMANCE CRITERIA
	5.3 Unused ink is correctly labelled and stored according to manufacturer/supplier specifications and enterprise procedures 5.4 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.5 All product is removed from operating area 5.6 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 5.7 Repair/adjustment is verified prior to resumption of operations
6. Clean and wash up printing machine at end of print run	6.1 Cylinders, plate and roller surfaces are cleaned ready for next run 6.2 Inking system and dampening system are washed up ready for next run, and liquid waste is disposed of according to company and regulatory requirements 6.3 In-line printing/converting/binding/finishing units are cleaned ready for next run 6.4 Transportation and delivery systems are disengaged and cleaned ready for next run 6.5 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	3.2, 3.3, 4.1, 5.1, 5.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.6, 4.2, 5.3, 5.6, 6.6	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.1-3.3, 3.6, 4.1, 4.2, 5.1-5.3, 5.6	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	6.5	Interprets and analyses a range of mathematical information used in familiar and routine tasks

Navigate the world of work	2.1-2.5, 3.1-3.4, 3.6, 3.7, 4.1-4.3, 5.1-5.4, 5.6, 6.1-6.6	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with others	3.1-3.3, 3.6, 4.1, 4.2, 5.1-5.3, 5.6	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1, 1.2, 2.1-2.5, 3.1, 3.4-3.7, 4.1-4.3, 5.1-5.7, 6.1-6.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel OR - sheet
Setting up and adjusting MUST include EITHER:	- unwind and rewind reels - webbing procedures - splicing/joining reels - printed web viewing devices - folder and sheeter systems - set off / marking prevention devices OR - feeder and delivery systems - sheet pick-up and transportation systems - transfer and control systems - set off / marking prevention devices

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN232 Produce basic lithographic printed product	ICPPR232C Produce basic lithographic printed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN232 Produce basic lithographic printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely operate a lithographic printing press consistent with efficient routine production flow that maintains product quality standards; ensuring any production problems are rectified with minimum downtime
- correctly shutdown production and clean and/or wash printing machine according to work health and safety (WHS) guidelines
- use control, monitoring and data entry systems
- find and use information relevant to the task from a variety of information sources
- produce TWO basic lithographic printing jobs (if possible, including at least one in-line process) according to job specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

For reel systems only

- identify WHS concerns applicable to loading and handling heavy reels
- describe effect on the print of excessive tension on the rewinding reel
- identify implications if web is not spliced correctly

For sheet systems only

- explain why sheets are fanned before loading into the press
- identify that the double sheet detector must be set and checked during the print run
- identify components that can be adjusted to ensure correct delivery
- describe effect of excessive suction on the slow-down wheels

Lithographic printing operations

- describe required action if non-image area of the print was scumming during printing
- identify causes of emulsification while printing on a lithographic printing press
- describe how to identify signs of wear in image area of the plate
- identify level the ink should be maintained at

In-line processes

- identify WHS concerns for in-line components of the press
- identify frequency in-line components of the job should be examined

Quality control and problem-solving

- identify precautions to ensure the rewound product is of consistent, acceptable quality
- describe how to identify material below acceptable standard
- identify how often product quality should be assessed
- identify how to mark product deemed unacceptable by the operator

Shutdown and wash press

- identify dangers of solvents and solutions used to clean the inking system, plates, cylinders and press
- describe effect of excessive gum on the plate image
- list parts of the machine to be thoroughly cleaned following the print run
- list components to be inspected for wear following the print run
- describe record-keeping requirements important for following or repeat prints

Information sources

- identify information sources (including machine manuals, safety documentation and other information) relevant to these tasks including where they are located and what they cover.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- a lithographic printing machine with in-line processes
- industry software packages
- special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN242 Produce basic pad printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely operate a pad printing machine ensuring efficient routing production flow that maintains product quality standards.

It applies to individuals working in the printing and graphic arts industry who perform a range of mainly routine tasks, work under direct supervision and use limited practical skills and knowledge in a defined context.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain routine pad printing process	1.1 Location of objects into fixtures is monitored and adjusted if necessary 1.2 Printing plate condition is monitored to ensure quality of printed product meets the approved proof standard 1.3 Printing pad condition is monitored and maintained to ensure quality of printed product meets the approved proof standard 1.4 Spatula and doctor blade are monitored and adjusted to ensure

ELEMENT	PERFORMANCE CRITERIA
	quality of printed product meets the approved proof standard OR 1.5 Ink cup is monitored and adjusted to ensure quality of printed product meets the approved proof standard 1.6 Printing ink viscosity is monitored and adjusted to ensure quality of printed product meets the approved proof standard
2. Maintain manual pre- and post-treatments	2.1 Manual loading is monitored and adjusted to ensure quality of printed product meets the approved proof standard 2.2 Manual pre-treatment is monitored and adjusted to ensure quality of printed product meets the approved proof standard 2.3 Drying racks are monitored and adjusted to ensure quality of printed product meets the approved proof standard
3. Maintain routine production process	3.1 Production process is operated in association with fellow workers and according to company specifications and planned daily schedule 3.2 Production is maintained within work health and safety (WHS) requirements, and company and manufacturer's specifications 3.3 Manual and/or automatic control is used as per specification 3.4 Performance is monitored and verified using the process control system according to enterprise procedures 3.5 Ink performance, colour, register and position of print are monitored and adjusted throughout production run 3.6 Production difficulties are anticipated and preventive action is taken to avoid disruption 3.7 Process adjustments to eliminate problems are reported according to enterprise procedures 3.8 Waste is sorted according to enterprise procedures
4. Identify and rectify faults	4.1 Problems in pad printing machine operation are identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to specified procedures and consistent with operator's skill level 4.3 Pad printing machine operation is checked to ensure correct operation 4.4 Faulty performance of equipment is identified and reported according to enterprise procedures
5. Conduct shutdown	5.1 Correct shutdown sequence is followed according to

ELEMENT	PERFORMANCE CRITERIA
	manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Unused ink is correctly labelled and stored according to manufacturer/supplier specifications and enterprise procedures 5.4 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.5 Product is removed from operating area 5.6 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 5.7 Repair/adjustment is verified prior to resumption of operations
6. Clean and wash printing machine at end of print run	6.1 Plates and pads are cleaned ready for next run 6.2 Inking system is washed up ready for next run, and liquid waste is disposed of according to company and regulatory requirements 6.3 Pre- and post-treatment units are cleaned ready for next run 6.4 Production records or other documentation are accurately completed, where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	3.1-3.3, 5.1, 5.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.7, 4.1, 4.4, 5.3, 5.6, 6.4	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.1-3.3, 3.7, 4.1, 4.4, 5.1-5.3, 5.6	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	6.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks

Navigate the world of work	1.2-1.6, 2.1-2.3, 3.1-3.4, 3.7, 3.8, 4.1, 4.2, 4.4, 5.1-5.4, 5.6, 6.1-6.2, 6.4	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment incorporating regulatory requirements and enterprise procedures
Interact with others	3.1-3.3, 3.7, 4.1, 4.4, 5.1-5.3, 5.6	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.6, 2.1-2.3, 3.1-3.6, 3.8, 4.1-4.4, 5.1-5.7	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN242 Produce basic pad printed product	ICPPR242C Produce basic pad printed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN242 Produce basic pad printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely produce TWO basic pad printing jobs (if possible on different substrates) to meet job specifications, enterprise procedures and work health and safety (WHS) requirements
- correctly shut down and clean pad printing machine and, if possible, rectify any production problems with minimum downtime.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline major WHS concerns of operating this machine
- identify where the Material Safety Data Sheets (MSDS) are stored and what information they contain
- explain different machine cycle modes and how colour density of a light image on a dark substrate can be improved
- outline process for selecting the appropriate machine cycle mode to provide the highest production output for a particular product
- explain correct ink viscosity during production
- explain causes of unreleased ink remaining on the printing pad and how this issue is identified
- explain the correct process for recognising a damaged pad and the correct method of cleaning a pad during production
- outline pre- and post-treatment requirements and the simple pre-treatment commonly required for injection-moulded objects
- identify how long ink on the job takes to cure before scratch and adhesion tests can be performed

- describe common print problems, how they are identified, and how they can be rectified
- describe visible effects in the image if ink viscosity is incorrect
- outline the process for adjusting the machine to correct a shift in image position on the product
- identify machine manuals, safety and other documentation relevant to this task, where they are kept and information they contain.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- pad printing machine
- special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN261 Set up for foil stamping

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up and adjust a dye or block as well as a reel or sheet system for gold blocking and hot foil stamping.

It applies to individuals who work under direct supervision and typically prepare material, and monitor and run equipment and machinery.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Set up machine	2.1 Dye or block is selected and checked against job ticket 2.2 Dye or block is locked into chase and checked for correct positioning

ELEMENT	PERFORMANCE CRITERIA
	2.3 Chase is mounted in press 2.4 Foil transfer or feed system is set up and adjusted according to image size and job specifications 2.5 If required, in-line loading and ejection units are set up for basic processes and adjusted according to machine requirements and job specifications
3. Set up delivery systems	3.1 Delivery systems are set up and adjusted according to job specifications
4. Select foils	4.1 Foils are selected according to job specifications and end-user requirements 4.2 Quality and suitability of foils are checked and appropriate action taken 4.3 Foils are selected according to suitability of substrate, physical and chemical performance and properties 4.4 Foils are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 4.5 Foils are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions to prevent damage and hazards to personnel and to prolong shelf life
5. Conduct proof run	5.1 Material to be used for proof is organised correctly 5.2 Machine is operated according to manufacturer's and enterprise procedures to produce a specified proof 5.3 Proof is visually inspected and/or tested or laboratory testing organised according to enterprise procedures 5.4 Production does not commence without client authority where appropriate 5.5 Results are interpreted and adjusts made according to product and machine specifications to determine adjustment requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance	Description

	Criteria	
Reading	1.1, 2.1, 2.4, 2.5, 4.1, 4.4, 4.5, 5.4, 5.5	Recognises and evaluates text to establish job requirements from information contained within relevant systems
Writing	4.5	Completes workplace forms accurately
Oral Communication	2.4, 2.5, 4.1, 4.4, 4.5, 5.3-5.5	Participates effectively in spoken interactions to confirm or clarify understandings
Numeracy		Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1, 1.2, 2.1, 2.2, 2.4, 2.5, 4.1, 4.2, 4.4, 4.5, 5.2-5.5	- Complies with legislative requirements and follows organisational policies and procedures relevant to own role - Understands roles and responsibilities for task and makes basic decisions on work completion requirements, seeking assistance when required.
Interact with others	2.4, 2.5, 4.1, 4.4, 4.5, 6.3-6.5	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.2, 1.3, 2.1-2.5, 3.1, 4.2-4.5, 5.1-5.3, 5.5	- Determines priorities and sequences steps involved in clearly defined tasks - Implements actions as per instructions, making slight adjustments if necessary - Plans, identifies and assembles resources required to complete tasks - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include Either:	- reel OR - sheet OR - product jigs

Setting up and adjusting MUST include EITHER:	• unwind and rewind reels • webbing procedures • splicing/joining reels • printed web viewing devices • folder and sheeter • set off / marking prevention devices OR • feeder and delivery systems • sheet pick-up and transportation system • transfer and control system • set off / marking prevention devices OR • selecting jigs to suit product • fitting jigs to machine table • adjusting table height to suit product

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN261 Set up for foil stamping	ICPPR261C Set up for foil stamping	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN261 Set up for foil stamping

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely set up a dye or block and the reel or sheet systems or jigs for gold blocking or hot foil stamping and conduct a proof run and adjust settings to ensure production speeds are attained
- demonstrate the use of control, monitoring and data entry systems
- find and use information relevant to the task from a variety of information sources
- demonstrate all safety devices on the machine
- correctly set up for foil stamping on TWO occasions (if possible including at least one in-line process if relevant) according to manufacturer's and job specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Interpreting job specifications

- explain actions undertaken if vital information is missing from the job ticket
- list checks undertaken prior to set up (availability of materials etc.)

Web systems only

- describe purpose of nip rollers
- outline how sheet position is determined for the job
- discuss why the same side lay is used in both print and foil stamping
- identify how appropriate front lays are selected

Sheet or product delivery system (as relevant)

- list major work health and safety (WHS) concerns of setting up delivery systems
- explain how to determine the printing side of material
- explain how high side and front lays should be set
- explain why a register check should be carried out
- identify how to determine appropriate product jigs
- explain how to determine correct table height
- outline characteristics to consider when selecting foil for foil stamped product
- identify type of foil required for foiling on plastic films
- list THREE products and the foils appropriate for them
- list WHS concerns related to set up
- describe effect of soft packing on the foil stamped product
- identify methods to create harder packing
- explain the effect higher dwell time has on the foil stamped product
- identify the temperature that is the starting point when setting up
- explain implications if the temperature is set too high
- discuss the height dye should be mounted at
- explain how required pressure is determined
- identify precautions to protect from burns
- explain why not to use the first sheet or object printed as a proof during set up
- discuss what causes an uneven print (top to bottom)
- discuss how long it takes for temperature adjustments to come into effect
- identify signs a temperature setting is too high
- explain how much the foil should draw through the press on each pass
- identify machine manuals, safety and other documentation relevant to this task, where are they kept and the information contained.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- a hot foil stamping or gold blocking machine
- special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN262 Produce foil stamped product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce a foil stamped product using a gold blocking or hot foil machine in accordance with product quality standards.

It applies to individuals who work under direct supervision but are responsible for preparing materials, monitoring and cleaning equipment and machinery and ensuring the production process is maintained.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain operation of delivery systems	1.1 Delivery systems are monitored and adjusted to ensure efficient and continuous operation, without damage to finished product 1.2 Substrate is added to and removed from process according to job instructions
2. Maintain production process	2.1 Production process is operated in association with fellow workers and according to company specifications and planned daily schedule 2.2 If necessary, location of objects into fixtures/jigs is monitored

ELEMENT	PERFORMANCE CRITERIA
	and adjusted 2.3 Foil transfer system is monitored and adjusted to ensure quality of printed product meets the approved proof standard 2.4 Basic in-line printing/converting/binding/finishing process(es) are monitored and adjusted to ensure quality of product meets the approved proof standard 2.5 Production is maintained within work health and safety (WHS) requirements and company and manufacturer's specifications 2.6 Manual and/or automatic control is used as per specification 2.7 Performance is monitored and verified using the process control system according to enterprise procedures 2.8 Foil performance and position of print are monitored and adjusted throughout production run 2.9 Waste is sorted according to enterprise procedures
3. Identify and rectify problems	3.1 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.2 Process adjustments to eliminate problems are reported according to enterprise procedures 3.3 Faulty performance of equipment is identified and reported according to enterprise procedures 3.4 Problems in foil stamping machine operation are identified and reported according to enterprise procedures 3.5 Adjustments or corrections are carried out according to specified procedures and consistent with operator's skill level 3.6 Foil stamping machine operation is checked to ensure correct operation
4. Conduct shutdown of production process	4.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 4.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 4.3 Unused foil is correctly labelled and stored according to manufacturer/supplier specifications and enterprise procedures 4.4 Waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 4.5 All product is removed from operating area 4.6 Machine faults requiring repair are identified and reported to

ELEMENT	PERFORMANCE CRITERIA
	designated person according to enterprise procedures 4.7 Repair/adjustment is verified prior to resumption of operations
5. Clean printing machine at end of print run	5.1 Units are cleaned ready for next run 5.2 Transportation and delivery systems are disengaged and cleaned ready for next run 5.3 Production records or other documentation are accurately completed, where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	4.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	4.3, 4.6, 5.3	Enters routine data associated with production processes and enterprise procedures
Oral Communication	4.1, 4.2, 4.6	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Navigate the world of work	4.1, 4.2, 4.4, 4.6, 5.1-5.5	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role including achieving outcomes more efficiently and effectively - Recognises and follows all procedures for cleaning and maintenance of equipment Incorporating regulatory requirements and enterprise procedures
Interact with others	4.1, 4.2, 4.6	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations, identifying relevant information and ideas
Get the work done	4.1, 4.2, 4.4-4.7	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of

		familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel OR - sheet
Monitoring and adjusting MUST include EITHER:	- reel stand and rewind section - web control system - sheeting section - set off / marking prevention system - in-line loading - in-line injection OR - feeder and delivery - sheet pick-up and transport system - transfer systems - set off / marking prevention system

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN262 Produce foil stamped product	ICPPR262C Produce foil stamped product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN262 Produce foil stamped product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- operate a gold blocking or hot foil stamping machine ensuring an efficient production flow that maintains product quality standards. Any production problems are anticipated and rectified with minimum downtime. The machine is correctly shut down and cleaned according to work health and safety (WHS) guidelines
- demonstrate use of control, monitoring and data entry systems
- demonstrate an ability to find and use information relevant to the task from a variety of information sources
- produce TWO foil stamped products (if possible including at least one in-line process if relevant) according to job specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Maintaining in-feed and delivery of reel or sheet or 3D object transportation section

- identify WHS concerns when operating a transportation system

For reel systems only

- explain why tracking the web is important to position and register
- identify implications if web is not spliced correctly
- list identification used for web splices
- describe precautions to ensure rewound product is of consistent, acceptable quality

For sheet systems only

- explain why sheets are fanned before loading into the press
- describe impact printing double sheets has on the foil stamped product
- list components which, if sheeted, can be adjusted to ensure correct delivery
- explain how printed material below acceptable standard is identified
- describe aspects of loading and ejection that need to be monitored

Maintaining the foil stamping process

- identify major WHS concerns when foil stamping
- describe considerations that contribute to determining the ideal press speed
- explain at what interval the product should be checked for consistency
- identify the cause of non-image areas of the print filling in
- describe remedial action if the edges of the print are jagged
- explain why the use of anti-set off spray is not recommended when foil stamping
- describe how to adjust the machine to correct a shift in image position on the object

Shutdown and cleaning of the press

- identify dangers of solvents and solutions used to clean the press and printing dyes
- describe how dyes should be stored following printing
- list the effect of poorly stored dyes
- identify parts of the machine to be thoroughly cleaned following the print run
- list components to be inspected for wear following the print run
- identify records important for following or repeat prints

Information sources

- locate machine manuals, safety and other documentation relevant to this task and outline information included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN271 Set up for basic coating

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up and adjust rollers and the reel or sheet systems for coating a range of aqueous coatings, UV varnishes and machine varnishes.

It applies to individuals who work under direct supervision and prepare material, and monitor and run equipment and machinery.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Set up delivery systems	2.1 Delivery systems and are set up and adjusted according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	2.2 Substrate is removed from process according to job instructions
3. Select and prepare coating	3.1 Coating is selected according to job specifications and end-user requirements 3.2 Quality and suitability of coating is checked and appropriate action is taken 3.3 Coatings and additives are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 3.4 Correct weight/volume of coating is prepared to match requirements of the job specification and coating process 3.5 Check the viscosity of coating is correct for the job 3.6 Coating formulation is appropriately recorded
4. Set up machine for coating	4.1 Appropriate rollers/cylinders are selected and secured to the machine and set 4.2 Application system is set up and adjusted according to job specifications 4.3 Coating delivery system is set up with correct flow and return flow determined by air pressure or pump speeds, and adjusted according to job specifications 4.4 Coating blanket is cut or a plate installed for non-image areas 4.5 Blanket or plate packing is checked for job suitability 4.6 Coating temperature is checked for job suitability 4.7 Drying system is set up and adjusted according to job specifications
5. Conduct proof run	5.1 Material to be used for proof is organised correctly 5.2 Machine is set up and operated to produce a specified proof according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 5.3 Proof is visually inspected and/or tested or laboratory testing organised according to enterprise procedures 5.4 Production does not commence without client authority, where appropriate 5.5 Results are interpreted and adjustment changes are carried out according to product and machine specifications 5.6 Adjustments are carried out according to product and machine

ELEMENT	PERFORMANCE CRITERIA
	specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1, 3.3, 3.4, 4.2, 4.3, 4.7, 5.2, 5.4-5.6	Recognises and evaluates text to establish job requirements from information contained within relevant systems
Writing	3.6	Completes workplace forms accurately
Oral Communication	2.1-2.5, 3.1-3.5, 4.1, 4.3, 4.4, 5.2, 5.3, 5.7, 6.2-6.6	Participates effectively in spoken interactions to confirm or clarify understandings
Numeracy	4.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	3.1-3.5, 4.1-4.3, 4.5-4.7, 5.1-6.6	- Complies with legislative requirements and follows organisational policies and procedures relevant to own role - Understands roles and responsibilities for task and makes basic decisions on work completion requirements, seeking assistance when needed
Interact with others	3.1, 3.3, 3.4, 4.2, 4.3, 4.7, 5.2, 5.3, 5.5, 5.6	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done.	1.1-1.3, 3.1-3.5, 4.1-4.7, 5.1-5.3, 5.5, 5.6	- Determines priorities and sequences steps involved in clearly defined tasks - Implements actions as per instructions, making slight adjustments if necessary - Plans, identifies and assembles resources required to complete tasks - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems must include EITHER:	• reel OR • sheet
Monitoring and adjusting MUST include EITHER:	• unwind and rewind reels • web control system • print web viewing devices • set off / marking prevention devices OR • feeder and delivery • sheet pick up and transportation system • transfer and control systems • set off / marking prevention devices

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN271 Set up for basic coating	ICPPR271C Set up for basic coating	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN271 Set up for basic coating

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up rollers and reel or sheet systems for coating a range of aqueous coatings, UV varnishes and machine varnishes and conduct a proof run and adjust settings to ensure production speeds are attained
- demonstrate use of control, monitoring and data entry systems
- demonstrate all safety devices on the machine
- set up for TWO basic coating operations (one spot coating and one overall coating and, if possible, including at least one in-line process) according to manufacturer's and job specifications, and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Interpret job specifications

- identify where information about the type of required coating is located on the work ticket
- explain actions to be taken if vital information is missing from the job ticket
- outline checks to be done prior to set up (availability of materials etc.)

For reel systems only

- list major work health and safety (WHS) concerns when setting up the reel transportation system
- outline safety risks associated with the machine's rewind section
- explain how low web tension and inefficient web splices impacts the print
- identify how the machine recognises if there has been a web break
- describe effect of excessive web tension at the rewind section of the machine

- discuss how to determine reel position for the job

For sheet systems only

- list major WHS concerns when setting up the sheet transportation system
- discuss how to determine sheet position for the job
- explain how appropriate front lays are selected
- list reasons for a two-sheet cut-out on most feeders
- identify how the machine recognises if a sheet is missing or late
- identify how the coating side of the material is chosen
- identify why a register check is carried out

Delivery system

- identify impact of too much vacuum on slow-down wheels has on the job
- describe what determines position of register or bustle wheels
- outline impact of excessive jogging on the stack

Coating preparation

- list WHS concerns relevant to use of coatings
- list THREE types of coating
- describe how suitability of coating for the job is determined
- outline how ability of the coat to adhere to the product is determined
- explain how to determine how much coating is required
- describe range of viscosities to be run with on aqueous coatings
- outline the impact of incorrect viscosity
- explain how to adjust viscosity of a coating

Machine set-up

- explain methods the coating uses to solidify
- explain what is required to dry UV coating
- explain printing principles used to apply aqueous coating
- describe what temperature the drier should be set at to dry aqueous coating
- outline how to determine which image carrier (plate or blanket) to use

Proofing and adjustments

- describe how position of the coating is checked against the print
- discuss the impact skeleton wheels have on the coating surface
- outline how the amount of gloss on the surface can be measured
- identify who is responsible for the final OK on the job
- describe the impact of not enough coating on a sheet
- describe the impact a UV coating has on a wet print

Information sources

- identify machine manuals, safety and other documentation relevant to this task, where are they kept and the information contained.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- a printing machine or dedicated coating machines with manual, semi-automated, fully automated or computerised process control.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN272 Produce basic coated product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely operate a reel or sheet-fed machine, ensuring efficient production and maintaining quality standards.

It applies to individuals working in the printing and graphic arts industry performing a range of mainly routine tasks, who work under direct supervision and use limited practical skills and knowledge in a defined context.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain operation of delivery systems	1.1 Delivery systems are monitored and adjusted to ensure efficient and continuous operation and ensure no damage to finished product 1.2 Substrate is added to and removed from process according to job instructions
2. Maintain coating process	2.1 Roller condition is monitored and adjusted to ensure quality of printed product meets the approved proof standard

ELEMENT	PERFORMANCE CRITERIA
	2.2 Coating system is monitored and adjusted to ensure quality of product meets the approved proof standard 2.3 Drying systems are monitored and adjusted to ensure quality of product meets the approved proof standard 2.4 Quality and viscosity of varnish are monitored and adjusted as necessary to ensure quality of product
3. Maintain production process	3.1 Basic or complex in-line printing/converting/binding/finishing processes are monitored and adjusted to ensure quality of product meets the approved proof standard if required 3.2 Delivery is monitored and adjusted to ensure quality and efficient product delivery if required 3.3 Production process is operated in association with fellow workers and according to company specifications and planned daily schedule 3.4 Production is maintained within work health and safety (WHS) requirements and company and manufacturer's specifications 3.5 Manual and/or automatic control is used as per specification 3.6 Performance is monitored and verified using the process control system according to enterprise procedures 3.7 Coating performance, register and position of coating are monitored and adjusted throughout production run 3.8 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.9 Process adjustments to eliminate problems are reported according to enterprise procedures 3.10 Waste is sorted according to enterprise procedures
4. Identify and rectify problems	4.1 Faulty performance of equipment is identified and reported according to enterprise procedures 4.2 Problems in coating machine are identified and reported according to enterprise procedures 4.3 Adjustments or corrections are carried out according to specified procedures and consistent with operator's skill level 4.4 Coating machine operation is checked to ensure correct operation
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and

ELEMENT	PERFORMANCE CRITERIA
	in compliance with WHS requirements 5.3 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.4 Product is removed from operating area 5.5 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 5.6 Repair/adjustment is verified prior to resumption of operations
6. Clean and wash coating machine	6.1 Cylinders, plate and roller surfaces are cleaned ready for next run 6.2 Coating delivery system is washed ready for next run, and liquid waste is disposed of according to company and regulatory requirements 6.3 In-line slitting units are cleaned ready for next run 6.4 Transportation and delivery systems are disengaged and cleaned ready for next run 6.5 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	3.3-3.5, 4.3, 5.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.3, 3.9, 4.1, 4.2, 6.5, 6.5	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.3-3.5, 3.9, 4.1-4.3, 5.1, 5.2, 5.5	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	6.5	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the	2.1-2.4, 3.1-3.4, 3.6,	Recognises and follows explicit and implicit protocols

world of work	3.9, 3.10, 4.1-4.4, 5.1-5.3, 5.5, 6.1-6.5	- and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment Incorporating regulatory requirements and enterprise procedures
Interact with others	3.3-3.5, 4.1-4.3, 5.1, 5.2, 5.5	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1, 1.2, 2.1-2.4, 3.3-3.8, 3.10, 4.1-4.4, 5.1-5.6, 6.1-6.4	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel OR - sheet
Monitoring and adjusting MUST include EITHER:	- reel stand and rewind section - web control system - sheeting section OR - feeder and delivery - sheet pick-up and transport system - transfer system

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN272 Produce basic coated product	ICPPR272C Produce basic coated product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN272 Produce basic coated product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly produce TWO basic coating jobs (one spot coating and one overall coating and, if possible, including at least one in-line process) according to job specifications, enterprise procedures and work health and safety (WHS) requirements
- safely shut down and clean either reel- or sheet-fed machine and, if possible, rectify any problems with minimum downtime.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline required action if vital information is missing from the job ticket
- list checks undertaken prior to set-up

For reel systems only

- identify WHS concerns related to loading and handling heavy reels
- describe effect on the print of excessive tension on the rewinding reel
- outline the result if the web is not spliced correctly
- outline precautions to ensure rewind product is consistent, acceptable quality

For sheet systems only

- identify importance of sheets being fanned before loading into the press
- explain importance of setting and checking the double sheet detector during the print run
- describe components that can be adjusted to ensure correct delivery if sheeted

- explain the effects of anti-set-off spray on the finished job, and level the coating should be maintained at in the pan
- outline the process if printed material is below acceptable standard
- explain major WHS concerns when coating and action taken if the aqueous coating is smudged in the machine delivery section
- outline effect the UV lamp has on UV coating
- explain dangers of solvents and solutions used to clean the coating system, plates, cylinders and press
- identify parts of the machine to be thoroughly cleaned following coating of the job
- identify components to be inspected for wear following the print run
- explain records important for following or repeat prints
- identify machine manuals, safety and other documentation relevant to this task, where are they kept, and the information contained.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- reel- or sheet-fed machine.
- special purpose tools, equipment and materials

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN282 Produce and manage basic digital print

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to construct a range of electronic data files, perform basic colour management techniques and produce and manage a print run to achieve maximum productivity.

It applies to individuals working in the printing and graphic arts industry who perform a range of mainly routine tasks, work under direct supervision and use limited practical skills and knowledge in a defined context.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Troubleshoot and maintain operations of digital print system	1.1 Errors in operation of hardware and consumable components in the printing module of a digital printing system are identified and rectified 1.2 Source of errors related to electronic data file, digital front-end, workstation or industry software or hardware printing systems is located and rectified and/or technical assistance is coordinated according to manufacturer's specifications

ELEMENT	PERFORMANCE CRITERIA
	1.3 Preventive maintenance is performed according to manufacturer's specifications to ensure digital print system functions at optimum productivity with minimum downtime and wastage 1.4 Incompatibilities between versions of hardware and software used in digital printing are identified and rectified
2. Liaise with clients	2.1 Print service and quality expectations are clearly communicated to client according to enterprise procedures 2.2 Advice is provided to clients on how to set up electronic data files for digital printing according to enterprise procedures, manufacturer's specifications and digital print equipment capabilities 2.3 Advice is provided to clients on appropriate substrates and document finishing methods for digital printing jobs, according to client's budget and job specifications
3. Perform basic electronic document impositions	3.1 Electronic file imposition using a range of industry software is completed according to job specifications 3.2 Document finishing requirements for an imposed digital print job are finalised with co-workers or external services, if required, according to equipment availability and enterprise procedures
4. Perform basic digital colour management	4.1 Red Green Blue (RGB), Cyan Magenta Yellow Black (CMYK) and PMS colour charts are outputted and differences between computer monitor colour and digitally printed colour are adjusted 4.2 Common problems of colour digital printing are rectified and communicated to clients according to job specifications
5. Access and verify electronic data files	5.1 Workstation computer and industry software are used to locate and retrieve electronic data files according to job specifications 5.2 Digital front-end processor is used to locate and retrieve electronic data files according to job specifications 5.3 Preview or pre-flight check of electronic data files is performed to verify correct job set-up according to job specifications 5.4 Basic troubleshooting methods are applied to identify unverified data files, file errors and job requirement inconsistencies according to manufacturer's specifications
6. Submit data files to digital print system	6.1 Job priority is determined according to job specifications and production schedules

ELEMENT	PERFORMANCE CRITERIA
	6.2 Data files are submitted to print and image quality checks, and machine productivity checks are performed
7. Produce digital proof and run print job	7.1 Proof run is conducted to confirm proof conforms to job specifications and/or for client approval 7.2 Print run is conducted according to job specifications ensuring machine productivity and quality are monitored and rectified throughout the print job
8. Coordinate and/or perform document finishing and client delivery	8.1 Steps required for document finishing are determined, if not performed on in-line finishing units, on a web or sheet-fed system according to enterprise procedures 8.2 Finished print work is packaged to prevent damage and to conform to delivery requirements according to job specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.3, 3.1, 4.2, 5.1-5.4, 6.1, 7.1, 7.2, 8.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	2.1-2.3	Communicates relationships between ideas and information in a style appropriate to audience and purpose
Oral Communication	1.2, 1.3, 2.1-2.3, 3.1, 3.2, 4.2, 5.1-5.3, 6.1, 7.1, 7.2, 8.2	- Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies - Determines client and stakeholder requirements to inform a design or technical brief
Numeracy	2.2	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.2, 1.3, 2.1-2.3, 3.1, 3.2, 4.2, 5.1-5.4, 6.1, 6.2, 7.1, 7.2, 8.1, 8.2	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Complies with work health and safety (WHS), legislative requirements and follows organisational policies and procedures relevant to own role
Interact with	1.2, 1.3, 2.1-2.3, 3.1,	Cooperates with others as part of familiar routine

others	3.2, 4.2, 5.1-5.3, 6.1, 7.1, 7.2, 8.2	activities, and contributes to specific activities requiring joint responsibility and accountability Understands what to communicate, with whom and how in routine work situations, identifying relevant information and ideas
Get the work done	1.1-1.4, 3.1, 3.2, 4.1, 4.2, 5.1-5.4, 6.1, 6.2, 7.1, 7.2, 8.1, 8.2	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Recognises and anticipates an increasing range of familiar problems, actively looking for early warning signs and implementing contingency plans - Plans, identifies and assembles resources required to complete tasks - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN282 Produce and manage basic digital print	ICPPRN282C Produce and manage basic digital print	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN282 Produce and manage basic digital print

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- accurately produce a flowchart that demonstrates FOUR examples of digital print workflows for digital printing (one basic document file, one variable data document file, one colour document file and one electronically imposed document file)
- conduct and manage a digital print run according to client specifications and work health and safety (WHS) requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- name safety devices that need to be in place when working on the machine
- explain a paper misfeed, how to access and clear it
- explain potential problems with front to back registration, and if substrate weight and machine specifications do not match
- outline problems that can occur when downloading files from a digital front-end and how can they be solved, including distinguishing between problems with downloading from a digital front-end, and with the printing module
- describe action if a digital front-end loses communication with the printing module
- outline precautions to maintain fit, proportion and position of printed images, and how to ensure the machine has been calibrated to manufacturer's specifications
- outline the process if image colour is not consistent
- outline the process for ensuring correct dimensions and measurements have been set up in the pre-press stage
- identify quality issues if improper substrate handling procedures are not performed

- identify machine manuals, safety and other documentation relevant to machine operation and maintenance, where they are kept, and how to find information relating to industry software applications and other relevant sources of information
- describe the process if the incorrect version of software is loaded or needs an update
- outline actions if vital information is missing from the job ticket (manual or electronic)
- outline checks undertaken prior to set-up (availability of material, maintenance)
- outline the process if a file does not transfer correctly and what to do to correct the problem
- outline checks to ensure data is in a format that can be used in digital printing, and benefits of using electronic data rather than scanning hardcopy
- describe ways to submit a PDF file to the digital printer
- describe the process to ensure clients have correct procedures for providing electronic files
- describe the process of explaining to a client differences in colour displayed on a computer monitor compared to printed output
- outline recommendations to a client who has created an electronic file in an incompatible software application
- describe the process for estimating turnaround time for a client with a tight deadline
- describe steps for client approval of the print
- proofing and adjustment and circumstances where a job would be modified before printing
- outline situations where margins would be changed when the job reaches the printer
- name what the proof is checked against
- describe the final approval process for basic jobs
- describe the process for adjusting colour, toner/ink coverage or dealing with density problems
- outline the process if required substrate were unavailable
- name the maximum and minimum weight of substrate that can be printed on a specific machine, and maximum feeding and delivery quantities for the machine
- explain possible problems with incorrect feeding and delivery
- explain OHS procedures to follow when setting up in-line processes
- outline in-line options and on-line finishing options available on the machine
- describe the process for document finishing and client delivery
- describe various types of binding, and procedures, if the binding method required by the client is not available at your site
- outline options if the document size is too thick to staple
- describe importance of packaging of finished print work.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN283 Use digital media consumables

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to select, use and load digital media consumables such as printing substrates, inks and toners.

It applies to individuals who generally work under direct supervision and assist with digital production workflow including monitoring stock levels.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify and select consumables	1.1 Required consumables are identified in consultation with appropriate personnel and in accordance with both job specifications and manufacturer's guidelines 1.2 Consumables are appropriately selected for each individual job
2. Use consumables	2.1 Consumables are prepared and loaded according to work health and safety (WHS) requirements and manufacturer's and enterprise procedures and specifications 2.2 Identify and remove faulty products

ELEMENT	PERFORMANCE CRITERIA
	2.3 Identify and rectify incorrect substrate usage
3. Monitor storage of consumables and stock levels	3.1 Monitor stock levels to enterprise requirements 3.2 Store consumables according to manufacturer's specifications 3.3 Inform appropriate personnel of low stock levels and new orders placed

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 3.1, 3.2,	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.2, 3.3	Completes job documentation in a style appropriate to audience and purpose
Oral Communication	1.1, 2.1, 3.3	Receives and passes on straightforward messages
Navigate the world of work	1.1, 1.2, 2.1, 3.1, 3.2,	Recognises and follows explicit and implicit protocols including WHS requirements associated with own role
Interact with others	1.1, 2.1, 3.3	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1, 1.2, 2.1-2.3, 3.1-3.3	- Takes responsibility for planning and organising own workload including identifying and rectifying familiar problems - Plans, identifies and assembles resources required to complete tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN283 Use digital media consumables	ICPPR283A Use digital media consumables	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN283 Use digital media consumables

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify, use and store consumables used in a digital workflow
- rectify incorrect substrate usage where applicable
- remove faulty products
- monitor stock levels of consumables within the workplace
- safely prepare and load consumables
- locate and use information relevant to the task from a variety of sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain all WHS factors to be addressed when using and loading consumables
- identify all relevant manuals and safety documentation relevant to digital media consumables, including material safety data sheets (MSDS)
- identify various consumables used in the digital sector and appropriately select correct product for each printing and/or finishing device
- understand cause of printing faults which can occur due to poor storage of consumables and substrate misuse.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials

- digital media consumables

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN284 Use colour management systems

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to identify and apply fundamental theory of colour including terminology, colour modes and analysis of light and colour.

It applies to individuals who generally work under direct supervision and assist with digital production workflow.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify need for colour management	1.1 Varied colour representations across devices are recognised and recorded according to job requirements 1.2 Colour inconsistencies between input, display and output devices, and printed products are identified and addressed 1.3 Components of colour management systems are identified and correctly used
2. Use colour modes and libraries	2.1 Colour modes and libraries are used according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	2.2 Images are converted between colour modes using processes that ensure best reproduction according to job specifications 2.3 Colour libraries are selected and used within software applications according to job specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.1-2.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	1.1, 1.3	Completes job documentation in a style appropriate to audience and purpose
Oral Communication	1.3, 2.1-2.3	Receives and passes on straightforward messages
Navigate the world of work	1.3, 2.1-2.3	Recognises and follows explicit and implicit protocols associated with own role including appropriate work health and safety (WHS) requirements associated with immediate role
Interact with others	1.3, 2.1-2.3	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1-1.3, 2.1-2.3	Takes responsibility for planning and organising own workload including identifying and rectifying familiar problems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN284 Use colour management	ICPPR284A Introduction to	Updated to meet Standards for	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
systems	colour management	Training Packages Renamed to reflect industry practice	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN284 Use colour management systems

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- recognise variations and inconsistencies in colour representation across devices
- identify and use components of a colour management system
- select and convert images to appropriate colour modes
- select colour libraries that comply with specific job specifications
- locate and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify components of a colour management system and their application
- explain terminology associated with colour management
- identify standard lighting conditions for matching colour
- describe effects of different lighting conditions on monitors, proofing and printing
- explain measurement of light intensity and colour temperature
- identify differences between red, blue, green (RGB), cyan, magenta, yellow, black (CMYK), lab colour and spot colour
- list different rendering intents and their application
- describe under-colour removal (UCR) and grey component replacement (GCR) and the effect they have on an image
- explain different pantone libraries and their application
- identify work health and safety (WHS) issues to consider when managing colour for digital production.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- industry software packages used for colour management production.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN285 Use digital workflow

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to apply digital workflow from concept stage to completion and delivery. It focuses on a basic knowledge and application of digital work processes, where another person is responsible for overall planning.

It applies to individuals working under supervision in any type of digital production area.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for digital workflow	1.1 Job requirements are obtained, correctly interpreted and confirmed 1.2 Digital work processes required for completing the job are identified and recorded 1.3 Equipment and materials are selected to meet job requirements 1.4 Software appropriate to the work application is selected 1.5 Safety requirements are followed according to safety plans and policies

ELEMENT	PERFORMANCE CRITERIA
2. Follow digital workflow	2.1 Work is performed in a logical and efficient sequence 2.2 Problems are identified and solutions found within scope of role based on knowledge of digital process 2.3 Tasks are completed and checked for compliance against work instructions
3. Maintain the workplace	3.1 Work area is cleared and materials disposed of or recycled in accordance with environmental management plan 3.2 Equipment is cleaned, checked, maintained and stored according to manufacturer's recommendations and standard work practices

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.5, 3.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	1.2	Completes job documentation in a style appropriate to audience and purpose
Oral Communication	1.1, 1.3, 1.5, 3.1, 3.2	Receives and passes on straightforward messages
Numeracy	1.5	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1-1.5, 2.1, 2.2, 3.1, 3.2	Recognises and follows explicit and implicit protocols including work health and safety (WHS) requirements associated with own role
Interact with others	1.1, 2.2	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1-1.4, 2.1-2.3, 3.1, 3.2	- Takes responsibility for planning and organising own workload including identifying and rectifying familiar problems - Plans, identifies and assembles resources required to complete tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN285 Use digital workflow	ICPPR285A Use digital workflow	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN285 Use digital workflow

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce at least TWO products by following correct processes in a digital workflow:
 - correctly interpret requirements
 - select appropriate equipment and software
 - complete tasks according to job requirements

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe the different aspects of a digital workflow:
 - content confirmation
 - scheduling
 - communication processes
 - file management – naming, storage, saving, archiving
 - editing processes
 - distribution
- discuss the order procedures are undertaken within a digital workflow
- discuss different problems that may occur in a digital workflow and ways these may be avoided or addressed
- identify types of equipment used in a digital workflow
- explain types of software used in a digital workflow, their key features and purpose
- describe printing and other publication processes used within a digital workflow

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- high-end graphics and layout software
- digital output devices.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN286 Finish a digital product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes skills and knowledge required to finish a digital print product. This could include trimming, folding, padding, stapling, comb and wire binding.

It applies to individuals who generally work under direct supervision, converting and finishing off digitally printed products in a digital environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related materials is checked and recorded
2. Produce test copy	2.1 Materials to be used for the job are identified and organised correctly 2.2 Equipment is set up and operated to produce a specified sample

ELEMENT	PERFORMANCE CRITERIA
	according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 2.3 Sample is inspected and/or tested to ensure it meets job specifications and enterprise standards 2.4 Results are interpreted to determine adjustment requirements 2.5 Adjustments are carried out according to product and equipment specifications
3. Maintain finishing process	3.1 Finishing is maintained according to WHS requirements, manufacturer's specifications and enterprise procedures 3.2 Performance is monitored and verified using the process control system according to enterprise procedures 3.3 Finishing difficulties are anticipated and action is taken to prevent occurrence by timely intervention 3.4 Process adjustments to eliminate problems are reported according to enterprise procedures 3.5 Faulty performance of equipment is identified and reported according to enterprise procedures 3.6 Waste is sorted according to enterprise procedures 3.7 Production records or other documentation are accurately completed where required by enterprise procedures
4. Identify and rectify problems and faults	4.1 Problems with finishing equipment are identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 4.3 Finishing equipment operation is checked to ensure correct operation

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.2, 2.3, 2.5, 3.1	Recognises and interprets text to establish job requirements from information contained within

		relevant procedures and specifications
Writing	1.3, 3.7, 4.1	Completes workplace forms accurately
Oral Communication	1.1, 2.2, 2.3, 2.5, 3.4, 3.5, 4.1	Participates effectively in spoken interactions by using strategies to confirm, clarify or repair understanding
Navigate the world of work	1.1, 1.2, 2.1-2.3, 2.5, 3.1, 3.2, 3.4-3.7, 4.1-4.3	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Complies with WHS, legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	1.1, 2.2, 2.3, 2.5, 3.4, 3.5, 4.1	Seeks to cooperate with others to achieve results in immediate work context
Get the work done	1.2, 1.3, 2.1-2.5, 3.1-3.6, 4.1-4.3	- With assistance, determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources - Responds to predictable problems and implements standard or logical solutions related to own role in immediate work environment - Reads data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN286 Finish a digital product	ICPPR286A Finish a digital product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN286 Finish a digital product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up and use binding and finishing equipment to produce finished, digitally printed products according to job specifications and within production timeframe
- find and use information relevant to the task from a variety of information sources
- demonstrate all safety devices on the machine
- finish a digital product using TWO different types of binding and/or finishing
- set up equipment and produce TWO bound and/or finished, digitally printed products (for each type of binding and/or finishing), according to manufacturer's and job specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe work health and safety (WHS) factors to be addressed when adjusting machinery
- name safety measures for setting up and operating finishing equipment
- outline information about binding found in the job documentation or production control system
- describe circumstances in which a machine needs to be adjusted
- list factors that determine the correct binding technique for a job
- discuss advantages and disadvantages of wire and comb binding
- describe advantages and disadvantages of saddle and side stitching
- nominate problems that may occur when folding a digitally printed job
- describe effect heat may have on a digitally printed product
- demonstrate correct cutting sequence and lay edges when trimming a job
- identify grain direction and the effects of grain direction on finishing processes

- discuss different types of finishing adhesives and their applications
- list likely problems if equipment is not properly cleaned and maintained

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, and materials
- industry software packages
- trimmers
- small guillotines
- electronic staple machines
- wire binding units.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN287 Use digital processes

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to apply various digital printing processes and select an appropriate method for a particular job.

It applies to individuals who generally work under direct supervision and use various digital printing processes working in the digital, commercial print, pre-press, bureau, high-end print or a combination of these business environments.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify digital processes	1.1 Various digital processes used within the workplace are identified and documented 1.2 Advantages or disadvantages of one process over another for a particular job are identified and a suitable option recommended
2. Assess job requirements	2.1 Printing requirements of the job are determined 2.2 Layout design of the job is reviewed to determine possible printing problems of using a particular process

ELEMENT	PERFORMANCE CRITERIA
	2.3 End application of the digital product is reviewed to ensure digital process will meet job specifications and enterprise standards
3. Apply digital process	3.1 Digital process is selected that ensures job specifications can be met 3.2 Digital process is completed in accordance job specifications and enterprise standards 3.3 Job is reviewed to ensure appropriate digital process was selected based on job specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.3, 3.1-3.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	1.1	Conveys intended meaning on familiar topics for a limited range of purposes and audiences
Oral Communication	2.3, 3.1-3.3	Participates effectively in spoken interactions by using strategies to confirm, clarify or repair understanding
Navigate the world of work	2.1, 2.3, 3.1-3.3	Complies with WHS, legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	2.3, 3.1-3.3	Seeks to cooperate with others to achieve and analyse results in immediate work context
Get the work done	1.1, 1.2, 2.2, 2.3, 3.1-3.3	- Plans, identifies and assembles resources required to complete tasks - Responds to predictable problems and implements standard or logical solutions related to own role in immediate work environment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN287 Use digital processes	ICPPR287A Use digital processes	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN287 Use digital processes

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify various digital printing processes used within the organisation
- select the most appropriate digital printing process for a particular job
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline various digital printing processes used within the digital sector
- explain advantages and disadvantages of each process
- describe types of substrates that best suit a particular process
- explain cost differences between each process
- list advantages and disadvantages digital processes have compared to traditional printing methods
- identify different applications digital products may be used for
- describe the effect heat can have on certain processes
- explain the effect light can have of certain processes
- describe how folding may affect appearance of a digitally printed job
- describe the layout design considerations when using a particular process
- identify which colours and combinations are not effective for certain processes
- identify work health and safety (WHS) issues in relation to each digital process
- identify the location of documentation or other information regarding digital processes.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment and materials used for colour management production.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN288 Produce basic relief printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce basic relief printed product through operation of a platen, cylinder or rotary printing machine.

It applies to individuals who generally work under direct supervision and assist in the production process by maintaining equipment, materials and quality standards.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain operation of reel system	1.1 Reel stand and rewind sections are monitored to ensure efficient continuous operation, correct tension and avoid marks or blemishes to finished product 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of web for efficient operation 1.3 Substrate is added to and removed from process according to job instructions 1.4 Sheeting section is monitored and adjusted to ensure quality

ELEMENT	PERFORMANCE CRITERIA
	and efficient product delivery 1.5 Set-off / marking prevention system is monitored and adjusted to ensure quality of the printed product meets the approved proof standard
2. Maintain operation of sheet system	2.1 Feeder and delivery sections are monitored and adjusted to ensure continuous and efficient feeding to machine 2.2 Sheet pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation 2.3 Transfer system is monitored and adjusted to ensure correct and continuous sheet handling and efficient operation 2.4 Substrate is added to and removed from the process according to job instructions 2.5 Set-off / marking prevention system is monitored and adjusted to ensure quality of the printed product meets the approved proof standard
3. Maintain basic routine relief printing process	3.1 Relief form or plate cylinder condition is monitored and adjusted to ensure quality of the printed product meets the approved proof standard 3.2 Relief impression surface condition is monitored and adjusted to ensure quality of the printed product meets the approved proof standard 3.3 Relief inking system is monitored and adjusted to ensure quality of the printed product meets the approved proof standard
4. Maintain routine production process	4.1 Production process is implemented in association with fellow workers and according to company specifications and planned daily schedule 4.2 Production is maintained within work health and safety (WHS) requirements and company and manufacturer's specifications 4.3 Manual and/or automatic control is used according to specification 4.4 Performance is monitored and verified using the process control system according to enterprise procedures 4.5 Ink performance, colour, register and position already included in line embellishments of print are monitored and adjusted throughout production run 4.6 Production difficulties are anticipated and action is taken to prevent occurrence by timely intervention

ELEMENT	PERFORMANCE CRITERIA
	4.7 Process adjustments to eliminate problems are reported according to enterprise procedures 4.8 Waste is sorted according to enterprise procedures
5. Identify and rectify problems	5.1 Problems in relief machine operation are identified and reported according to enterprise procedures 5.2 Adjustments or corrections are carried out according to specified procedures 5.3 Relief machine operation is checked to ensure correct operation
6. Conduct shutdown of production process	6.1 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 6.2 Unused ink is correctly labelled and stored according to manufacturer/supplier specifications and enterprise procedures 6.3 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 6.4 Embellishment equipment is correctly labelled and stored according to manufacturer's/supplier's specifications and enterprise procedures 6.5 All product is removed from operating area 6.6 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 6.7 Repair/adjustment are verified prior to resumption of operations
7. Clean and wash up printing machine at end of print run	7.1 Cylinders, plate and roller surfaces are cleaned ready for next run 7.2 Inking system is washed up ready for next run, and liquid waste is disposed of according to company and regulatory requirements 7.3 In-line printing/converting/binding/finishing units are cleaned ready for next run 7.4 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run 7.5 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run 7.6 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 2.4, 4.1-4.3, 5.2, 6.2, 6.4	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	4.7, 5.1, 6.6, 7.6	Enters routine data associated with production processes and enterprise procedures
Oral Communication	1.3, 2.4, 4.1-4.3, 4.7, 5.1, 5.2, 6.1, 6.2, 6.6	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	1.3, 2.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1-1.5, 2.1-2.5, 3.1-3.3, 4.1-4.4, 4.7, 4.8, 5.1-5.3, 6.1-6.4, 6.6, 7.1-7.6	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with others	1.3, 2.4, 4.1-4.3, 4.7, 5.1, 5.2, 6.1, 6.2, 6.6	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.5, 2.1-2.5, 3.1-3.3, 4.1-4.8, 5.1-5.3, 6.1-6.7, 7.1-7.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN288 Produce basic relief printed product	ICPPR288A Produce basic relief printed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN288 Produce basic relief printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce TWO basic relief printing jobs (if possible, including at least one in-line process) according to manufacturer's and job specifications and enterprise procedures using either a platen, cylinder or rotary printing machine (jobs should be completed while maintaining product quality standards, and production problems should be rectified with minimum downtime)
- correctly shut down machine and clean according to work health and safety (WHS) guidelines
- use control, monitoring and data entry systems
- manipulate embellishment tools and operations
- provide an example of printed material below acceptable standard.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain reel or sheet transportation and delivery systems
- explain WHS requirements when loading and handling heavy reel sheets fanned before loading into the press
- explain web tracking and importance to position and register
- describe consequences of not splicing web correctly
- list components to be adjusted to ensure correct delivery
- explain effect of excessive suction on the slow-down wheels
- identify frequency product quality should be assessed
- explain causes of a halo effect on the relief print

- identify signs of wear in the image area of the plate marking product deemed unacceptable by operator
- identify monitoring systems
- explain how to maintain ink levels
- explain WHS concerns for in-line components of the press
- discuss examination frequency of in-line components
- list quality control and problem-solving techniques
- describe precautions to ensure rewound product is of consistent, acceptable quality
- identify quality assurance processes
- describe appropriate actions if mild set-off was found on the back of the print
- explain who to consult if there are problems with the print that cannot be fixed by the operator
- show location of information concerning correct operation of the machine
- describe shutdown and wash procedures to clean machinery and equipment
- list dangers associated with solvents and solutions used to clean the inking system, plates, cylinders and press
- identify procedures for correctly storing plates following printing
- list parts of the machine to be thoroughly cleaned following the print run
- identify components to be inspected for wear following the print run
- explain important records to be kept for repeat prints
- identify machine manuals, safety and other documentation relevant to this task, where are they kept and the information contained.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, and materials
- platen, cylinder or rotary printing machines.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN313 Set up for basic flexographic printing

Modification History

Release	Comments
Release 2	This version released with ICP Printing and Graphic Arts Training Package Version 2.0. Version created to amend outdated application section.
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up machines for routine flexographic printing.

It applies to individuals who work as print machinists and prepare material, and monitor and run equipment and machinery, and apply solutions to printing difficulties as they arise.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm routine job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is carried out correctly in minimum time with minimum wastage

ELEMENT	PERFORMANCE CRITERIA
	1.3 Availability of all job-related components are checked 1.4 Proofed job is checked for conformance with job specifications
2. Set up delivery systems	2.1 Delivery systems are correctly set up and adjusted according to job specifications 2.2 Substrate is added to and removed from process according to job specifications
3. Select and prepare inks and solvents	3.1 Inks and solvents are selected according to routine job specifications and end-user requirements 3.2 Quality and suitability of inks and solvents are checked and appropriate action taken 3.3 Inks and solvents are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 3.4 Correct colour and weight/volume of ink are mixed and viscosities checked and modified according to press requirements and routine job specifications 3.5 Ink formula and approved colour drawdowns are appropriately recorded 3.6 Inks and solvents are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions and relevant hazardous liquids storage regulations
4. Set up machine for basic flexographic printing	4.1 Flexographic plate cylinders are installed and register adjustments centred OR 4.2 Sleeves are installed in press and register adjustments made OR 4.3 Plate mounting sheets are mounted on cylinders in press and register adjustments made 4.4 Plate cylinders are gauged up or pre-set to impression 4.5 Inking system is set up and roller nips/blades are set correctly 4.6 Ink circulation is maintained at correct level and flow for machine requirements 4.7 Viscosities are adjusted according to job specifications 4.8 Air volume and drier temperatures or curing systems are selected to suit inks, substrate, solvents and according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	4.9 Air volume is adjusted between colours to maximise drying and minimise air overspill
5. Set up in-line units for basic process(es)	5.1 Minor in-line printing/converting/binding units are set up for basic process(es) and adjusted to suit machine requirements and job specifications 5.2 Assistance is given in set-up of major in-line printing/converting/binding units.
6. Conduct print run	6.1 Material to be used for print is organised correctly 6.2 Press is set up and operated according to WHS guidelines 6.3 Print impressions are set to minimum kiss impression 6.4 Web tensions are correctly set at unwind, between stations and rewind 6.5 Print is checked for register 6.6 Drying is checked as sufficient to key ink to the substrate 6.7 Viscosities are adjusted to obtain correct colour at proof speed and checked against colour matching system 6.8 Substrate is checked against job specifications
7. Organise print inspection and/or testing	7.1 Print is visually inspected and/or tested, or laboratory testing is organised according to enterprise procedures 7.2 Production does not commence without client OK where appropriate
8. Readjust settings to production speed	8.1 Production speed print results are interpreted and appropriate adjustments are made to press, ink and substrate settings 8.2 Adjustments are made according to product specifications and press performance 8.3 Web is spliced at production speed and further samples are obtained for quality inspections at appropriate intervals where applicable 8.4 Press setting is documented and samples are retained

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.4, 3.1, 3.3, 3.4, 3.6, 4.7, 4.8, 5.1, 6.8, 8.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.5, 3.6, 8.4	Enters routine data associated with production processes and enterprise procedures
Oral Communication	1.4, 3.4, 4.7, 4.8, 5.1, 5.2, 6.8, 7.1, 7.2, 8.3	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	3.4, 4.6, 4.8, 6.8, 8.1	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1, 1.2, 1.4, 3.1-3.6, 4.1-4.8, 5.1, 6.1-6.8, 7.1, 8.1-8.3	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with others	1.4, 3.4, 4.7, 4.8, 5.1, 5.2, 6.8, 7.1, 7.2, 8.3, 8.4	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.4, 2.1, 2.2, 3.1-3.4, 3.6, 4.1-4.9, 5.1, 5.2, 6.1-6.8, 7.1, 7.2, 8.1-8.4	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include	reel

EITHER:	OR
Setting up and adjusting MUST include EITHER:	• sheet
	• checking reels for treatment levels, coatings, printing side and age of product • securing reels on reel shaft • correctly positioning reels on unwind stand • positioning and mounting correctly cut cores on rewind shafts • centring and setting edge guide • setting unwind and rewind tension to suit substrate • setting nip rollers OR • feeder • sheet pick-up and transportation system • transfer system • delivery • sheet transfer and control system • set off / marking prevention devices

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN313 Set up for basic flexographic printing Release 2	ICPPRN313 Set up for basic flexographic printing Release 1	Updated to amend application	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN313 Set up for basic flexographic printing

Modification History

Release	Comments
Release 2	This version released with ICP Printing and Graphic Arts Training Package Version 2.0. Version created to amend outdated application section.
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate all safety devices on the machine
- demonstrate use of control, monitoring and data entry systems
- set up a press on TWO occasions for basic flexographic printing (if possible including at least ONE in-line process), according to manufacturer's specifications and enterprise procedures. The individual will also conduct a proof run and adjust settings to ensure production speeds are attained.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Job requirements

- describe what to do if vital information is missing from the job ticket
- ensure all required materials are available prior to set up

Flexographic printing plates and cylinders or sleeves OR plate mounting sheets

- identify precautions to avoid damaging plates and cylinders

For reel systems only

Reel in-feed

- explain work health and safety (WHS) factors to consider when operating the reel in-feed and delivery system
- explain how to correctly select printing side of the material
- describe the effect of low web tension on the print
- name types of web splices that could be used appropriately for the job

Reel delivery system

- describe effect of excessive web tension at the rewind of the machine
- discuss how to minimise three risks associated with the rewind

For sheet systems only**Sheet in-feed**

- explain WHS factors to consider when operating the sheet in-feed and delivery system
- describe why the sheet is normally set up in the middle of the machine
- describe effect side-lay selection has on the job
- describe how appropriate front lays should be selected
- describe what determines position of the sheet before it is transported to the printing unit
- explain how a register check is carried out
- discuss why a two-sheet cut is used on most feeders
- discuss how the machine recognises if a sheet is missing or late

Sheet delivery system

- describe why application of spray powder is sometimes advisable
- discuss effects of too much spray powder
- show how slowdown devices may be used in delivery
- identify effect of excessive jogging on the stack

Selection and preparation of inks and additives

- name major environmental and WHS concerns with regard to inks and additives
- describe how ink suitability is matched to a particular job
- describe implications if ink is too viscous
- describe how an ink that is slightly light can be modified to meet the job needs
- identify methods to check ink for correct colour
- name the person who passes the colour prior to running the job

Machine set-up

- discuss all WHS factors to consider when setting up the machine
- show how machine specifications are determined, relating to a specific job
- discuss steps to ensure the inking system is adjusted correctly
- describe why inking system ink level is maintained at a certain level
- list necessary precautions when handling doctor/chamber blades

- identify optimum make-ready-speed for the job
- explain basic in-line processes
- list steps to incorporate the in-line processes into the make-ready
- describe how equipment used in in-line processing is protected against damage during set-up
- list precautions to take if uv drying is utilised to dry the ink film

Proofing and adjustment

- identify methods to minimise waste during make-ready
- list procedures required to have the print approved
- describe quality control measurements to apply to the proof to test against known standards
- outline how to check on initial print prior to running
- describe how setting adjustments are determined
- identify processes to plot success of the machine adjustment
- describe how final results are recorded for future reference

Relevant test procedures

- identify and describe tests for scuffing and coefficient of friction
- show circumstances in which these tests should be applied

Leaching

- discuss leaching

Information sources

- identify machine manuals, safety and other documentation relevant to this task and where are they kept, and information contained.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- a range of standard inks and substrates
- a variety of stack, in-line and central impression flexographic printing machines.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN314 Produce complex flexographic printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up machines for non-routine flexographic printing.

It applies to individuals who work as print machinists who prepare material, and monitor and run equipment and machinery and apply solutions to printing difficulties as they arise.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain non-routine operation of reel transportation system	1.1 Reel stand is monitored and adjusted to ensure efficient, continuous operation 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous web positioning for efficient operation 1.3 Substrate is added to process according to job instructions
2. Maintain non-routine operation of reel delivery	2.1 Reel rewind section is monitored and adjusted to maintain correct tension and avoid marks, blemishes or damage to finished

ELEMENT	PERFORMANCE CRITERIA
system on web-fed machine	product 2.2 Substrate is removed from process according to non-routine job instructions 2.3 Sheeting section is monitored and adjusted to ensure quality and efficient product delivery 2.4 Set-off / marking prevention system is monitored and adjusted to ensure quality of printed product without set-off or marking meets the approved proof standard
3. Maintain complex flexographic printing process	3.1 Flexographic plate and plate cylinder or sleeve condition is monitored and adjusted to ensure quality of printed product meets the approved proof standard 3.2 Flexographic impression roller condition is monitored to ensure the quality of printed product meets the approved proof standard 3.3 Flexographic inking system and doctor blade condition are monitored and adjusted to ensure quality of printed product meets the approved proof standard 3.4 Drying systems are monitored and adjusted to ensure quality of printed product meets the approved proof standard 3.5 In-line printing/converting/binding/finishing processes are monitored and adjusted to ensure quality of product meets the approved proof standard
4. Maintain non-routine production process	4.1 Production process is operated in association with fellow workers and according to company specifications and planned daily schedule 4.2 Production is maintained within work health and safety (WHS) requirements and company and manufacturer's specifications 4.3 Automatic control is used as per specification 4.4 Manual control is used as per specification 4.5 Ink performance, colour, register and position of print are monitored and adjusted throughout production run 4.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 4.7 Process adjustments to eliminate problems are reported according to enterprise procedures 4.8 Faulty performance of equipment is identified and reported according to enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
	4.9 Waste is sorted according to enterprise procedures
5. Identify and rectify faults	5.1 Problems in flexographic machine are identified and reported according to enterprise procedures 5.2 Adjustments or corrections are carried out according to specified procedures and consistent with operator's skill level 5.3 Flexographic machine operation is checked to ensure correct operation 5.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures
6. Conduct shutdown of production process	6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 6.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 6.3 Reels and cores are removed from press 6.4 Unused ink is drained back into containers and correctly labelled and stored according to manufacturer's/supplier's specifications and enterprise procedures 6.5 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 6.6 All product is removed from operating area
7. Clean and wash up printing machine at end of print run	7.1 Cylinders or sleeves, plate and roller surfaces are cleaned ready for next run 7.2 Inking rollers and doctor blades or chamber blade systems are cleaned with correct solvents according to WHS guidelines 7.3 Ink pumps, tanks and hoses are cleaned correctly 7.4 Impression rollers/central impression and press rollers are cleaned 7.5 In-line printing/converting/binding/finishing units are cleaned ready for next run 7.6 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run 7.7 Press is lubricated and protected according to duration of shutdown 7.8 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 2.2, 4.1-4.4, 5.2, 6.1, 6.4	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	4.7, 4.8, 5.1, 5.4, 6.4, 7.8	Enters routine data associated with production processes and enterprise procedures
Oral Communication	1.3, 2.2, 4.1-4.4, 4.7, 4.8, 5.1, 5.2, 5.4, 6.1, 6.2	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	1.3	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1-1.3, 2.1-2.4, 3.1-3.5, 4.1-4.4, 4.7-4.9, 5.1-5.4, 6.1, 6.2, 7.1-7.6, 7.8	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with others	1.3, 2.2, 4.1-4.4, 4.7, 4.8, 5.1, 5.2, 5.4, 6.1, 6.2	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.3, 2.1-2.4, 3.1-3.5, 4.1-4.6, 4.8, 4.9, 5.1-5.4, 6.1-6.3, 6.6, 7.1-7.7	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN314 Produce complex flexographic printed product	ICPPRN314C Produce complex flexographic printed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN314 Produce complex flexographic printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- operate a reel-fed flexographic press ensuring an efficient THREE or more colour production flow that maintains product quality standards. Any production problems are anticipated and rectified with minimum downtime. The machine is correctly shut down and cleaned according to work health and safety (WHS) guidelines
- demonstrate use of control, monitoring and data entry systems
- monitor production output and make necessary adjustments to maintain print quality on a flexographic machine while producing a complex print on TWO occasions (if possible using different substrates, and if possible including at least TWO in-line processes) according to job specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Reel transportation and web control

- explain what causes the reel to wander
- explain what causes web to break at the unwind unit
- describe the difference between a 'flying paster' and 'zero speed' type reel-stand
- explain what print fault results from the reel being run out of centre
- identify possible faults in the unwind section that could cause a web break

Reel delivery for rewinding and sheeting

- identify WHS risks associated with rewinding and sheeting
- identify the safety feature in the delivery system that helps if the web jams up
- explain why the sheet cut-off might wander

- describe the effect of poorly adjusted nip rollers when rewinding and sheeting

Printing and drying units

- explain what happens if the plate lifts on the leading edge during a print run
- explain how a build-up of ink on the impression cylinder affects the printed product
- explain what causes ink to foam in the ink tray
- explain the effect of too much reducer in the ink
- list actions that reduce wear of the doctor blade
- explain why it is necessary that all solvents be removed from the final ink film
- describe the link between driers and set off and marking
- explain what causes UV ink to dry
- explain what causes substrate to distort
- list the effect in the chillers if the drying temperature was too low
- explain the effect of incorrect drying temperature on the finished product
- discuss why it is advisable not to eat or drink near the machine when using UV inks

In-line processes

- explain why it is necessary to frequently examine in-line components of the job
- describe how consistency of the punching unit is checked
- explain the outcome of excessive pressure on the slitters

Maintaining production process

- describe safety features within the organisation that aid in maintaining effective production
- identify who is legally responsible if removal of machine guards and/or disconnection of micro switches occurs
- describe the effect of inadequate communication within the work team
- explain ramifications if machine guards are removed and/or micro switches are disconnected on a machine
- explain what other measurements besides optimum solid ink density can be measured to assess print quality
- determine the accurate method of checking register during a production run
- describe why it is necessary to take immediate action when anticipating production problems
- explain actions to eliminate further processing of unacceptable printed product
- determine result to the substrate if relative humidity is increased in the press room
- explain the procedure to care for a newly delivered substrate to the press room
- describe why waste should be sorted and the advantage of keeping reusable waste

Client liaison

- identify what industry standards that can be applied to enhance client communication
- describe necessary procedures clients should follow to OK a printed product

Flexographic machine operating problems

- explain when it is necessary to call service personnel to correct a machine problem

- describe enterprise procedures in place to report any machine operating problems

Shutdown procedures

- explain what happens if correct shutdown procedures are not followed
- explain why it is necessary that correct shutdown procedures are conducted with fellow workers
- list advantages of proper labelling and storage of excess inks and materials
- identify why printed product needs to be clearly labelled prior to removal from the press room
- determine what further operations are required for printed reels once they are removed from the printing machine
- explain how the printed job should be stored after removal from the printing machine
- detail cleaning and washing the printing unit
- explain what WHS concerns should be observed when handling ink
- identify safety precautions for cleaning the printing cylinders
- explain why it is necessary to thoroughly clean and wash the printing unit prior to the next print run
- explain why anilox cells should be thoroughly cleaned
- describe how plates can be stored to minimise damage

Cleaning feed, transportation, delivery and in-line sections

- explain work health and safety (WHS) precautions for cleaning these sections of the machine
- explain why it is necessary to maintain a clean substrate handling section of the machine

Completing production records

- identify what completed records are used in the final analysis of the job
- explain benefits of comprehensive records when considering production of future jobs
- identify machine manuals, safety and other documentation relevant to this task, where are they kept and information contained.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- a range of standard inks and substrates
- a variety of stack, in-line and central impression flexographic printing machines.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN321 Set up for basic gravure printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up routine gravure printing for routine print jobs.

It applies to individuals who prepare material, and monitor and run equipment and machinery, and apply solutions to a defined range of unpredictable problems. Individuals may also provide leadership and guidance to members of their team.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm routine job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Set up reels	2.1 Unwind and rewind reels are set up and adjusted according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	2.2 Webbing procedures are carried out according to job specifications 2.3 Web-control system is set up and adjusted according to job specifications 2.4 Reels are spliced/joined according to job specifications 2.5 Printed web viewing devices are set up and adjusted according to job specifications 2.6 Folder and sheeter are set up and adjusted according to job specifications 2.7 Set off / marking prevention devices are set up and adjusted according to job specifications
3. Select and prepare inks and additives (basic)	3.1 Inks, dyes or additives are selected according to job specifications and end-user requirements 3.2 Quality and suitability of inks, dyes or additives are checked and appropriate action is taken 3.3 Inks, dyes and additives are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 3.4 Correct colour and weight/volume of ink are mixed and prepared to match requirements of the printing process and job specifications 3.5 Formulation of ink, colour match and approved colour are appropriately recorded 3.6 Inks, dyes and additives are appropriately labelled, handled and stored according to manufacturer's/ supplier's instructions to prevent damage and hazards to personnel and to prolong shelf life
4. Set up machine for basic gravure printing	4.1 Gravure cylinders are selected, installed, set up and adjusted according to job specifications 4.2 Impression roller is set up and adjusted according to job specifications 4.3 Inking system / doctor blade is set up and adjusted according to the gravure process and job specifications 4.4 Drying system is set up and adjusted according to job specifications
5. Conduct proof run	5.1 Material to be used for proof is organised correctly 5.2 Machine is operated according to manufacturer's and enterprise procedures to produce a specified proof

ELEMENT	PERFORMANCE CRITERIA
	5.3 Proof is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 5.4 Production does not commence without client OK or authority where appropriate 5.5 If necessary, results are interpreted and adjustments made according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1-2.7, 3.1, 3.3, 3.4, 3.6, 4.1-4.4, 5.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.5, 5.4	Enters routine data associated with production processes and enterprise procedures
Oral Communication	2.1-2.7, 3.1, 3.3, 3.4, 3.6, 4.1-4.4, 5.3-5.5	Participates effectively in spoken interactions by using strategies to confirm, clarify or repair understanding
Numeracy	3.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1, 1.2, 2.1-2.7, 3.1-3.4, 3.6, 4.1-4.4, 5.2-5.5	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Complies with WHS, legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	2.1-2.7, 3.1, 3.3, 3.4, 3.6, 4.1-4.4, 5.3-5.5	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.2, 1.3, 2.1-2.7, 3.1-3.4, 3.6, 4.1-4.4, 5.1, 5.2, 5.5	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Plans, identifies and assembles resources required to complete tasks - Responds to predictable problems and implements

		standard or logical solutions Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN321 Set up for basic gravure printing	ICPPR321C Set up for basic gravure printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN321 Set up for basic gravure printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly demonstrate all safety devices on the machine
- set up a press on TWO occasions for basic gravure printing (if possible including at least one in-line process) according to manufacturer's specifications and enterprise procedures, conduct a proof run and adjust settings to ensure production speeds are attained.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Job requirements

- describe what to do if vital information is missing from the job ticket
- explain materials required prior to set up

Cylinders

- identify correct cylinders for each job
- identify important considerations when handling gravure cylinders
- describe what parts of the unit to check to ensure cylinder is installed correctly

Reel in-feed on the machine

- list work health and safety (WHS) considerations of operating reel in-feed and delivery systems
- identify how the material printing side is selected
- describe the effect of low web tension on the print
- identify other types of web-splices that could be used for the job

Delivery system on the machine

- list risks linked with the rewind of the machine
- explain the effect of excessive web tension at the rewind of the machine

Selection and preparation of inks and additives

- explain environmental and WHS risks related to inks and additives
- describe how ink suitability is matched to a particular job
- describe what happens if the ink is too viscous
- explain how an ink that is slightly light can be modified to meet the needs of the job
- identify available methods to check for correct ink colour
- identify who passes the colour prior to running the job

Machine set-up

- identify necessary precautions when handling doctor blades
- explain how machine specifications are determined for each individual job
- list steps to ensure ink levels in the inking system are maintained at an appropriate level
- outline how to determine if the inking system has been adjusted appropriately

Basic in-line processes

- list steps to incorporate in-line process into the make ready
- explain how equipment used in in-line processing is protected against damage during set-up

Proofing and adjustment

- explain procedures to have the print approved
- describe quality control measurements to apply to the proof to test against known standards
- identify what to check on the initial print prior to running
- explain how to determine settings adjustments
- describe what process is used to plot success of the machine adjustment
- outline how final results are recorded for future reference

Information sources

- identify what machine manuals, safety and other documentation are relevant to this task and where they are kept.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- a gravure printing machine with in line units.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN322 Produce complex gravure printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce non-routine gravure printed product.

It applies to individuals who operate a gravure press and maintain product quality standards. Individuals may also provide leadership and guidance to members of their team.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain non-routine operation of reel transportation system	1.1 Reel stand is monitored and adjusted to ensure efficient continuous operation 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of web for efficient operation 1.3 Substrate is added to process according to job instructions
2. Maintain non-routine operation of reel delivery	2.1 Reel rewind section is monitored and adjusted to maintain correct tension and to avoid marks, blemishes or damage to

ELEMENT	PERFORMANCE CRITERIA
system	finished product 2.2 Substrate is removed from process according to job instructions 2.3 Sheeting section is monitored and adjusted to ensure quality and efficient product delivery 2.4 Set-off / marking prevention system is monitored and adjusted to ensure quality of printed product without set-off or marking meets the approved proof standard
3. Maintain complex gravure printing process	3.1 Gravure cylinder condition is monitored and adjusted to ensure quality of printed product meets the sample sheet standard 3.2 Gravure impression roller condition is monitored and maintained to ensure quality of printed product meets the sample sheet standard 3.3 Gravure inking system and doctor blade are monitored and adjusted to ensure quality of printed product meets the sample sheet standard 3.4 Drying systems are monitored and adjusted to ensure quality of printed product meets the approved proof standard
4. Maintain operation of in-line processes	4.1 In-line printing/converting/binding/finishing processes are monitored 4.2 In-line printing/converting/binding/finishing process are adjusted to ensure quality of product meets the approved proof standard
5. Maintain non-routine production process	5.1 Production process is operated in association with fellow workers and according to company specifications and planned daily schedule 5.2 Production is maintained within work health and safety (WHS) requirements and company and manufacturer's specifications 5.3 Manual and/or automatic control is used as per specification 5.4 Performance is monitored and verified using the process control system according to enterprise procedures 5.5 Ink performance, colour, register and position of print are monitored and adjusted throughout production run 5.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 5.7 Process adjustments to eliminate problems are reported according to enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
	5.8 Waste is sorted according to enterprise procedures
6. Identify and rectify faults	6.1 Problems in gravure machine are identified and reported according to enterprise procedures 6.2 Adjustments or corrections are carried out according to specified procedures and consistent with operator's skill level 6.3 Gravure machine operation is checked to ensure correct operation 6.4 Faulty performance of equipment is identified and reported according to enterprise procedures
7. Conduct shutdown of production process	7.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 7.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 7.3 Unused ink is correctly labelled and stored according to manufacturer/supplier specifications and enterprise procedures 7.4 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 7.5 All product is removed from operating area 7.6 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 7.7 Repair/adjustment is verified prior to resumption of operations
8. Clean and wash up printing machine at end of print run	8.1 Cylinders, plate and roller surfaces are cleaned ready for next run 8.2 Inking system is washed ready for next run, and liquid waste is disposed of according to company and regulatory requirements 8.3 In-line printing/converting/binding/finishing units are cleaned ready for next run 8.4 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run 8.5 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run 8.6 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 2.2, 5.1-5.3, 6.2, 7.1, 7.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	5.7, 6.1, 6.4, 7.3, 7.6, 8.6	Enters routine data associated with production processes and enterprise procedures
Oral Communication	1.3, 2.2, 5.1, 5.2, 5.7, 6.1, 6.2, 6.4, 7.1-7.3, 7.6	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	1.3	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1-1.3, 2.1-2.4, 3.1-3.4, 4.2, 5.1-5.4, 5.7, 5.8, 6.1-6.4, 7.1-7.4, 7.6, 8.1-8.6	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with others	1.3, 2.2, 5.1-5.3, 5.7, 6.1, 6.2, 6.4, 7.1-7.3, 7.6	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.3, 2.1-2.4, 3.1-3.4, 4.1, 4.2, 5.1-5.8, 6.1-6.4, 7.1-7.7, 8.1-8.6	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN322 Produce complex gravure printed product	ICPPR322C Produce complex gravure printed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN322 Produce complex gravure printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- operate a gravure press ensuring an efficient non-routine production flow that maintains product quality standards; any production problems are rectified with minimum downtime; and the machine is correctly shut down and cleaned according to work health and safety (WHS) guidelines
- monitor production output and make necessary adjustments to maintain print quality on a gravure machine while producing a complex print on TWO occasions (if possible using different substrates and, if possible, including at least two in-line processes) according to job specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Reel transportation and web control

- identify what can cause the reel to wander
- describe what can cause the web to break at the unwind unit
- outline the difference between a "flying paster" and "zero speed" type reel-stand
- discuss what print fault results from the reel being run out of centre
- describe types of faults in the unwind section which can cause a web break

Reel delivery for rewinding and sheeting

- discuss WHS risks associated with rewinding and sheeting
- describe the safety feature in the delivery system for when the web jams
- discuss the cause of sheet cut-off wander
- outline effects of poorly adjusted nip rollers when rewinding and sheeting

Printing and drying unit

- discuss how a build-up of ink on the impression cylinder can affect printed product
- outline the cause of ink foaming in the ink tray
- describe the effect of too much reducer in the ink
- identify how to reduce doctor blade wear
- describe why it is necessary to remove all solvents from the final ink film
- discuss the link between driers and set-off and marking
- identify what causes the substrate to distort
- discuss what happens in the chillers if the drying temperature is too low
- outline the effect of incorrect drying temperature on finished product

In-line processes

- discuss why it is necessary to frequently examine in-line components of the job
- outline how consistency of the punching unit is checked
- describe the impact of excessive pressure on the slitters
- discuss the benefit of identification numbers on jobs with multiple similar images
- describe how the ratio of print to in-line speed is controlled

Maintaining production process

- discuss possible effects of inadequate communication within the work team on a gravure printing machine
- describe safety features within the organisation which aid in maintaining effective production
- identify ramifications if machine guards are removed and/or micro switches are disconnected on a machine
- name the person held legally responsible for the removal of machine guards and/or disconnection of micro switches
- discuss the most accurate method of checking register during a production run
- outline why it is necessary to take immediate action when production problems are anticipated
- describe what to do to eliminate further processing of unacceptable printed product
- discuss what happens to the substrate if the relative humidity increases in the press room
- outline the correct procedure to care for a newly delivered substrate to the press room
- discuss why waste should be sorted
- describe advantages of keeping reusable waste
- outline industry standards to enhance effective communication with clients
- discuss procedures a client should follow to OK a printed product

Gravure machine operating problems

- describe when it is necessary to call service personnel to correct a machine problem
- identify enterprise procedures to report machine operating problems

Shutdown procedures

- discuss what happens if correct shutdown procedures are not followed

- describe why it is necessary that correct shutdown procedures are conducted with fellow workers
- outline advantages of proper labelling and storage of excess inks and materials
- discuss why printed product should be clearly labelled prior to removal from the press room
- outline further operations required for printed reels after removal from the printing machine
- describe how printed jobs should be stored after removal from the printing machine

Cleaning and washing the printing unit

- list WHS concerns of handling ink
- outline safety precautions for cleaning the printing cylinders
- discuss why it is necessary to thoroughly clean and wash the printing unit prior to the next print run
- describe why the doctor blades should be thoroughly cleaned
- explain why doctor blades should be handled with extreme care
- describe how to store printing cylinders to minimise damage

Cleaning feed, transportation, delivery and in-line sections

- list WHS precautions for cleaning these sections of the machine
- discuss why it is necessary to maintain a clean substrate handling section of the machine

Completing production records

- outline how completed records are used in the final analysis of the job
- describe benefits of comprehensive records when considering production of future jobs
- identify what machine manuals, safety and other documentation are relevant to this task, where they are they kept and describe the information contained.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- gravure printing machines and in-line units.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN331 Set up for basic lithographic printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up basic lithographic printing sheet-fed and web-fed machines, including small offset for routine print jobs.

It applies to individuals working under direct supervision who prepare material, monitor and run equipment and machinery, and maintain the production process.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Standard set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job-related components are checked
2. Set up delivery systems	2.1 Delivery systems are set up and adjusted according to job specifications 2.2 Substrate is added to and removed from the process according

ELEMENT	PERFORMANCE CRITERIA
	to job specifications
3. Select and prepare inks and additives (basic)	3.1 Inks, dyes or additives are checked and appropriate action is taken for end-user requirements 3.2 Quality and suitability of inks, dyes or additives are selected according to job specifications and end-user requirements 3.3 Inks, dyes and additives are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions taken to minimise waste 3.4 Correct colour and weight/volume of ink are mixed and prepared to match requirements of the printing process and job specifications 3.5 Formulation of ink, colour match and approved colour are appropriately recorded 3.6 Inks, dyes and additives are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions to prevent damage and hazards to personnel and prolong shelf life
4. Set up machine for basic offset lithographic printing	4.1 Plate cylinder is set up and adjusted and lithographic plates are selected and installed according to job specifications 4.2 Blanket and blanket cylinder are set up and adjusted according to job specifications 4.3 Impression cylinder is set up and adjusted according to job specifications 4.4 Inking system is set up and adjusted according to the lithographic process and job specifications 4.5 Dampening system is set up and adjusted according to job specifications
5. Conduct ok print run	5.1 Material to be used for proof ok sheet/section is organised correctly 5.2 Machine is operated according to manufacturer's and enterprise procedures to produce a specified proof ok/section 5.3 Ok/section is visually inspected and/or tested or laboratory testing organised according to enterprise procedures 5.4 Production does not commence without client OK or authority where appropriate 5.5 If necessary, results are interpreted and adjustment are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1, 3.3, 3.4, 3.6, 4.1-4.5, 5.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.5, 5.4	Enters routine data associated with production processes and enterprise procedures
Oral Communication	4.1-4.5, 5.3-5.5	Participates effectively in spoken interactions by using strategies to confirm, clarify or repair understanding
Numeracy	3.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1, 1.2, 3.1-3.4, 3.6, 4.1-4.5, 5.2-5.5	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Complies with WHS, legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	3.1, 3.3, 3.4, 3.6, 4.1-4.5, 5.3-5.5	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.2, 1.3, 3.1-3.4, 3.6, 4.1-4.5, 5.1, 5.2, 5.5	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Plans, identifies and assembles resources required to complete tasks - Responds to predictable problems and implements standard or logical solutions - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• reel OR • sheet
Setting up and adjusting MUST include EITHER:	• unwind and rewind reels • webbing procedures and web control systems • splicing reels • folder and sheeter OR • feeder and delivery • registration systems • sheet pick-up and transportation, control and transfer systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN331 Set up for basic lithographic printing	ICPPR331C Set up for basic lithographic printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN331 Set up for basic lithographic printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate use of control, monitoring and data entry systems
- demonstrate all safety devices on the machine
- set up for TWO basic lithographic printing jobs using either a wide or narrow reel or sheet-fed lithographic machine according to manufacturer's specifications and enterprise procedures and conduct a proof run and adjust settings to ensure production speeds are attained.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Interpreting job specifications

- explain what to do if vital information is missing from the job ticket
- explain checks to be done prior to set-up e.g. availability of materials

Preparing and fitting plates

- list problems that can result if the cylinder is not cleaned prior to plate fitting
- explain how the grip edge of the plate is identified
- describe the effect of over packing the printing plate cylinder
- discuss how pitch lines can be used to assist in plate installation
- name tools or actions likely to damage the plate
- explain why plates should be consistently tensioned

For reel systems only

Reel in-feed

- identify work health and safety (WHS) precautions for webbing up the machine
- discuss how to determine the printing side of the material
- explain the effect of low web tension on the print
- explain the purpose of nip rollers
- identify types of web splices appropriate for the job

Reel delivery system

- describe the effect of excessive web tension at the rewind of the machine
- list risks associated with the rewind of the machine

For sheet systems only**Sheet in-feed and transfer**

- identify WHS factors to be considered when setting up sheet in-feed and transfer systems
- explain why the sheet is normally set up in the middle of the machine
- describe the effect of side lay selection on the job
- explain how to determine the position of the sheet before it is transported to the printing unit
- outline how a register check is carried out
- describe why a two-sheet cut is used on most feeders
- explain how the machine knows if a sheet is missing or late
- explain why the application of spray powder is sometimes advisable
- explain the effects of too much spray powder
- explain why slowdown devices might be used in delivery
- outline the effect of excessive jogging on the stack

Preparation of inks and additives

- identify all WHS and environmental concerns associated with inks and additives
- explain what details to check for suitability of an ink for a job
- describe how to modify ink that is slightly light
- outline methods available to check ink for correct colour
- identify who passes the colour prior to running the job

Machine set-up

- list all work health and safety (WHS) factors to consider when setting up the machine
- explain how cylinder (plate, blanket and impression) specifications are determined for the specific job
- explain effects an incorrectly set dampening system may have on the job
- explain why ink profile varies across the machine
- explain what optimum ink duct sweep is

Basic in-line processes

- explain the correct machine position to engage in-line processing units
- list essential precautions required when setting up in-line processing units
- outline necessary precautions if UV drying is utilised to dry the ink film

Proofing and adjustment

- identify methods to minimise waste during make ready
- describe what to check on the initial print prior to running
- explain how the machine is proof tested
- outline ideal conditions for inspecting the proof
- describe methods to check and adjust ink colour and consistency
- identify adjustments that may cause mis-register
- list adjustments to position the image laterally
- identify adjustments to position the image circumferentially
- identify who has the final say in the approval of the job

Information sources

- identify machine manuals, safety and other documentation relevant to this task, where are they kept and the information contained.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- lithographic machine.

Assessment processes and techniques must be able to be modified for distance-based learners and be culturally appropriate and suitable to the communication skill level, language, literacy and numeracy capacity of the candidate and the work being performed.

Additional support may be needed for the Indigenous community and others from a non-English speaking background.

Where applicable, physical resources should include equipment modified for people with special needs as well as assistance to support their participation in the assessment process.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN332 Produce complex lithographic printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce complex lithographic printed product, ensuring an efficient non-routine production flow that maintains product quality standards.

It applies to individuals who work under direct supervision and have some responsibility in ensuring production process is maintained by anticipating production problems and monitoring equipment and machinery.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain non-routine operation of delivery system	1.1 Delivery systems are monitored and adjusted to ensure efficient and continuous operation and ensure no damage to finished product 1.2 Substrate is added to and removed from process according to job specifications
2. Maintain complex lithographic printing	2.1 Non-routine lithographic plate and plate cylinder condition are monitored and adjusted to ensure quality of printed product meets

ELEMENT	PERFORMANCE CRITERIA
process	the sample sheet standard 2.2 Non-routine lithographic blanket and blanket cylinder condition are monitored and adjusted to ensure quality of printed product meets the sample sheet standard 2.3 Non-routine lithographic impression cylinder condition is monitored and adjusted to ensure quality of printed product meets the sample sheet standard 2.4 Non-routine lithographic inking system is checked and maintained to ensure quality of printed product meets the sample sheet standard 2.5 Non-routine lithographic dampening system condition is monitored and adjusted to ensure quality of printed product meets the sample sheet standard 2.6 Set off / marking prevention and drying system is monitored and adjusted to ensure quality of printed product meets the sample sheet standard 2.7 Drying systems are monitored and adjusted to ensure quality of printed product meets the approved proof standard
3. Maintain production process	3.1 Production process is operated in association with fellow workers and according to company specifications and planned daily schedule 3.2 Production is maintained within work health and safety (WHS) requirements and company and manufacturer's specifications 3.3 Manual and/or automatic control is used as per specification 3.4 Performance is monitored and verified using the process control system according to enterprise procedures 3.5 Ink performance, colour, register and position of print are monitored and adjusted throughout production run 3.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.7 Process adjustments to eliminate problems are reported according to enterprise procedures 3.8 Faulty performance of equipment is identified and reported according to enterprise procedures 3.9 Waste is sorted according to enterprise procedures
4. Identify and investigate lithographic machine operating problem	4.1 Problem in lithographic machine operation is investigated 4.2 Problem in lithographic machine is identified and reported

ELEMENT	PERFORMANCE CRITERIA
	according to enterprise procedures
5. Rectify minor lithographic machine faults	5.1 Adjustments or corrections are carried out according to specified procedures and consistent with operator's skill level 5.2 Lithographic machine operation is checked to ensure correct operation
6. Conduct shutdown of production process	6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 6.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 6.3 Unused ink is correctly labelled and stored according to manufacturer's/supplier's specifications and enterprise procedures 6.4 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 6.5 All product is removed from operating area 6.6 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 6.7 Repair/adjustment is verified prior to resumption of operations
7. Clean and wash up printing machine at end of print run	7.1 Cylinders, plate and roller surfaces are cleaned ready for next run 7.2 Inking system and dampening system are washed ready for next run, and liquid waste is disposed of according to company and regulatory requirements 7.3 In-line printing/converting/binding/finishing units are cleaned ready for next run 7.4 Transportation and delivery systems are disengaged and cleaned ready for next run
8. Complete records	8.1 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	3.1-3.4, 6.1, 6.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.7, 3.8, 4.2, 6.3, 6.6, 6.7, 8.1	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.1-3.3, 3.7, 3.8, 4.2, 6.1-6.3, 6.6, 6.7	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	1.2	Interprets and analyses a range of mathematical information that is used in familiar and routine tasks
Navigate the world of work	1.1, 1.2, 2.1-2.7, 3.1-3.5, 3.7-3.9, 4.1, 4.2, 5.1, 5.2, 6.1-6.4, 6.6, 7.1-7.5, 8.1	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with others	3.1-3.3, 3.7, 3.8, 4.2, 6.1-6.3, 6.6, 6.7	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1, 1.2, 2.1-2.7, 3.1-3.9, 4.1, 4.2, 5.1, 5.2, 6.1-6.7, 7.1-7.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel OR - sheet

Monitoring and adjusting MUST include EITHER:	• reel stand and rewind sections • web control system • sheeting section • set off / marking prevention systems OR • feeder and delivery systems • sheet pick-up and transportation system • transfer systems • set/ off/marketing prevention system

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN332 Produce complex lithographic printed product	ICPPR332C Produce complex lithographic printed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN332 Produce complex lithographic printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- operate a lithographic press ensuring an efficient non-routine production flow that maintains product quality standards; production problems are anticipated and rectified with minimum downtime; and the machine is correctly shut down and cleaned according to work health and safety (WHS) guidelines
- demonstrate use of control, monitoring and data entry systems
- monitor production output and make necessary adjustments to maintain print quality on a lithographic machine while producing a complex print on TWO occasions (if possible using different types and sizes of substrates and, if possible, including at least two in-line processes) according to job specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

For reel systems only

Reel transportation and web control

- explain WHS requirements for operating the reel transportation system
- explain what can cause the reel to wander
- describe what can cause the web to break at the unwind unit
- explain the difference between a "flying paster" and "zero speed" type reel-stand
- identify the print fault that results from the reel being run out of centre
- list faults in the unwind section that can cause a web break

Reel delivery for rewinding and sheeting

- explain WHS risks associated with rewinding
- identify what safety feature is in the delivery system for when the web jams
- explain why the sheet cut-off wanders
- describe the effect of poorly adjusted nip rollers when rewinding and sheeting
- outline further operations required for printed reels after removal from the printing machine
- explain how to store the printed job after removal from the printing machine
- explain why it is necessary to label each printed reel

For Sheet Systems Only

Sheet transportation and transfer system

- explain WHS requirements associated with operating the sheet transportation system
- explain the result of worn suckers at the feeder suction head
- identify the type of two sheet detection on this machine
- discuss how much movement the sheet should have when being registered by the side lay
- explain possible causes of mis-register of the sheet at the feeder
- explain visible signs of the sheet being registered in the feeder
- explain how gripper malfunction can affect sheet control and transfer
- explain when to adjust sheet transfer mechanisms
- list causes of the feeder stack becoming uneven
- explain what happens if the feeder stack is not loaded levelly
- explain how unevenness of the feeder stack can be rectified

In-line processes

- explain how consistency of the punching unit is checked
- describe the outcome of excessive pressure on the slitters
- describe the outcome of a dirty former
- describe the outcome of defective pins in the folder
- describe the outcome of adjusting rollers at the base of the former
- list causes of the web jamming up in the folder

Sheet delivery

- explain WHS risks associated with sheeting
- describe the effect machine speed has on sheet delivery
- explain advantages of spraying moving sheets with anti-set-off powder in the delivery
- name items in the delivery that can mark the printed image
- outline remedial steps that may be necessary to eliminate marking on the printed image
- explain the function of a sheet decurler fitted to the delivery of some machines
- list faults that can result from incorrectly set grippers in the transfer section of a machine
- describe how the printed job should be stored after removal from the printing machine

Printing unit

- explain the result if the plate develops a crack at the grip edge during a print run
- explain the effect of a sticky blanket surface
- list print faults that result from the blanket not being tensioned correctly
- outline causes of blanket packing-creep during printing
- explain how a build-up of ink on the impression cylinder can affect the printed product
- describe the cause of ink lying back in the duct
- list causes of ink stripping on the inking rollers
- explain print faults that result from excessive use of fountain solution on the plate
- describe the recommended pH range for fountain solutions
- list causes of conductivity of the fountain solution changing over an eight-hour shift
- outline problems caused by excessive conductivity of the fountain solutions

Drying unit

- explain the link between driers and set-off and marking
- identify what causes UV ink to dry
- identify what causes the substrate to blister
- describe what happens in the chillers if the drying temperature was too low
- outline the effect of incorrect drying temperature on the finished product

Maintaining production process

- explain the effect of inadequate communication within the work team
- identify safety features within the organisation that help maintain effective production
- explain ramifications of machine guards being removed and/or micro switches being disconnected on a machine
- identify who is held legally responsible for the removal of machine guards and/or disconnection of micro switches
- explain disadvantages of using a closed looped system for automatic control of the printed product
- describe what other measurements besides optimum solid ink density can be measured to assess print quality
- outline the most accurate method of checking register during a production run
- explain why it is important to take immediate action when production problems are anticipated
- explain what action is taken to eliminate further processing of unacceptable printed product
- outline the effect of increases in relative humidity in the press room
- explain the procedure to care for a newly delivered skid of paper to the press room
- explain why waste should be sorted and the advantages of keeping reusable waste
- explain industry standards to enhance effective communication with the client
- discuss necessary procedures the client should follow to OK a printed product

Lithographic machine operating problems

- explain when it is necessary to call service personnel to correct a machine problem
- identify enterprise procedures in place to report any machine operating problems

Shutdown procedures

- list advantages of proper labelling and storage of excess inks and materials
- explain why printed product must be clearly labelled prior to removal from the press room

Cleaning and washing the printing unit

- explain work health and safety (WHS) requirements for handling ink
- explain safety precautions for cleaning the printing cylinders
- describe the washing procedure for offset rubber blanket
- determine how plates can be stored to minimise damage

Cleaning feed, transportation, delivery and in line sections

- explain WHS precautions for cleaning these sections of the machine

Completing production records

- explain how completed records are used in the final analysis of the job
- outline benefits of comprehensive records when considering the production of future jobs

Information sources

- identify machine manuals, safety and other documentation relevant to this task, where they are kept and the information contained.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- lithographic printing machine.

Assessment processes and techniques must be able to be modified for distance-based learners and be culturally appropriate and suitable to the communication skill level, language, literacy and numeracy capacity of the candidate and the work being performed.

Additional support may be needed for the Indigenous community and others from a non-English speaking background.

Where applicable, physical resources should include equipment modified for people with special needs as well as assistance to support their participation in the assessment process.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN341 Set up for basic pad printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up basic pad printing for routine print jobs and includes setting up and adjusting manual pre- and post-treatment processes and conducting a proof.

It applies to individuals who work under direct supervision, and have responsibility to prepare materials and monitor and run equipment and machinery to ensure the production process is maintained

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Install tampons	2.1 Appropriate tampons are selected according to job

ELEMENT	PERFORMANCE CRITERIA
(printing pads) into machine	specifications 2.2 Tampons are secured into machine
3. Set up fixtures onto machine bed	3.1 Appropriate fixtures are selected and secured to xy table 3.2 Height of machine bed is adjusted to suit size of object to be printed 3.3 Xy table of machine bed is adjusted to suit position of image on object
4. Select and prepare inks and additives	4.1 Inks and additives are selected according to job specifications and end-user requirements 4.2 Quality and suitability of inks and additives are checked and appropriate action is taken 4.3 Inks and additives are prepared according to work health and safety (WHS) requirements and manufacturer's/supplier's instructions with suitable precautions to minimise waste 4.4 Correct colour and weight/volume of ink are mixed and prepared to match requirements of the printing process and routine job specifications 4.5 Formulation of ink, colour match and approved colour are appropriately recorded 4.6 Inks and additives are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions to prevent damage and hazards to personnel and prolong shelf life
5. Set up machine for basic pad printing	5.1 Plate holder is set up and adjusted according to job specifications 5.2 Appropriate plate and plate holder are selected and plate is secured into plate holder 5.3 Tampons are set up and adjusted according to job specifications 5.4 Spatula and doctor blade are set up and adjusted according to requirements of the pad printing process and routine job specifications OR 5.5 Ink cup is set up and adjusted according to job specifications
6. Set up manual pre- and post-treatment processes	6.1 Manual loading is set up according to routine object requirements and job specifications 6.2 Manual pre-treatment is set up to suit routine object and

ELEMENT	PERFORMANCE CRITERIA
	according to job specifications 6.3 Drying racks are set up to suit object and according to job specifications
7. Conduct proof run	7.1 Material to be used for proof is organised correctly 7.2 Machine is operated according to manufacturer's requirements and enterprise procedures to produce a specified proof 7.3 Proof is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 7.4 Production does not commence without client approval or authority where appropriate 7.5 Results are interpreted and adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 4.1, 4.3, 4.4, 4.6, 5.1, 5.3-5.5, 6.1-6.3, 7.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	4.5, 7.4	Enters routine data associated with production processes and enterprise procedures
Oral Communication	2.1, 4.1, 4.3, 4.4, 4.6, 5.1, 5.3-5.5, 6.1-6.3, 7.3-7.5	Participates effectively in spoken interactions by using strategies to confirm, clarify or repair understanding
Numeracy	4.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1, 1.2, 2.1, 4.1-4.4, 4.6, 5.1-5.5, 6.1-6.3, 7.2-7.5	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Complies with WHS, legislative requirements and follows organisational policies and procedures relevant to own role
Interact with	2.1, 4.1, 4.3, 4.4, 4.6, 5.1, 5.3-5.5,	Cooperates with others as part of familiar routine activities, and contributes to specific activities

others	6.1-6.3, 7.3-7.5	requiring joint responsibility and accountability • Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.2, 1.3, 2.1, 2.2, 3.1-3.3, 4.1-4.4, 4.6, 5.1-5.5, 6.1-6.3, 7.1-7.3, 7.5	• Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency • Plans, identifies and assembles resources required to complete tasks • Responds to predictable problems and implements standard or logical solutions • Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN341 Set up for basic pad printing	ICPPR341C Set up for basic pad printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN341 Set up for basic pad printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up a pad printing machine on TWO occasions (if possible on different substrates) for routine print jobs to meet enterprise procedures, manufacturer's and job specifications; including setting up manual pre- and post-treatment processes and completing a proof run.
- demonstrate all safety devices on the machine.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Substrate identification

- identify what class of substrate the (given) object came from

Ink selection

- explain how to determine if an ink is appropriate to use with a particular substrate
- explain how to determine if an ink is mixed to the correct viscosity
- explain the pot life of a two-component ink

Pad selection

- explain how to determine the correct pad shape for applications
- describe what effect pad shape and hardness has on print quality
- outline the ideal storage conditions for pads

Plate selection

- explain how to determine the correct plate type for given applications

Doctor blades

- explain work health and safety (WHS) concerns of setting presses and doctor blades
- describe how to adjust the machine so the doctor blade operates correctly
- describe the effect of a damaged doctor blade

Pre- and post-treatment requirements

- explain WHS concerns of using pre- and post-treating substrates
- explain how to pre-treat an oily surface to ensure it is ready for printing

Print problem identification and correction

- identify causes of and solutions for common print problems (eg hairlines around image, loss of density in the centre of a solid image, fine lines of ink running through image, distortion of image)

Information sources

- identify machine manuals, safety and other documentation relevant to this task, where are they kept and the information contained.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- relevant facilities, materials and equipment
- pad printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN342 Produce complex pad printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce complex pad printed product ensuring an efficient non-routine production flow that maintains product quality standards.

It applies to individuals who work under supervision, and are responsibility for ensuring the production process is maintained in accordance with the requirements of the proof, and any equipment issues and production problems are identified and resolved with minimum downtime.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain non-routine pad printing process	1.1 Location of objects into fixtures is monitored and adjusted if necessary 1.2 Printing plates condition is monitored to ensure quality of printed product meets the approved proof standard 1.3 Printing pads condition is monitored and maintained to ensure quality of printed product meets the approved proof standard 1.4 Spatulas and doctor blades are monitored and adjusted to

ELEMENT	PERFORMANCE CRITERIA
	ensure quality of printed product meets the approved proof standard OR 1.5 Ink cups are monitored and adjusted to ensure quality of printed product meets the approved proof standard 1.6 Printing ink viscosity is monitored and adjusted to ensure quality of printed product meets the approved proof standard
2. Maintain in-line systems	2.1 In-line loading is monitored and adjusted to ensure quality of printed product meets the approved proof standard 2.2 In-line pre-treatment is monitored and adjusted to ensure quality of printed product meets the approved proof standard 2.3 In-line drying is monitored and adjusted to ensure quality of printed product meets the approved proof standard 2.4 In-line ejection is monitored and adjusted to ensure quality of printed product meets the approved proof standard
3. Maintain non-routine production process	3.1 Production process is operated in association with fellow workers and according to company specifications and planned daily schedule 3.2 Production is maintained within work health and safety (WHS) requirements and company and manufacturer's specifications 3.3 Manual and/or automatic control is used as per specification 3.4 Performance is monitored and verified using the process control system according to enterprise procedures 3.5 Ink performance, colour, register and position of print are monitored and adjusted throughout production run 3.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.7 Process adjustments to eliminate problems are reported according to enterprise procedures 3.8 Waste is sorted according to enterprise procedures
4. Identify and rectify faults	4.1 Problems in pad printing machine operation are identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to specified procedures and consistent with operator's skill level 4.3 Pad printing machine operation is checked to ensure correct operation 4.4 Faulty performance of equipment is identified and reported

ELEMENT	PERFORMANCE CRITERIA
	according to enterprise procedures
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Unused ink is correctly labelled and stored according to manufacturer/supplier specifications and enterprise procedures 5.4 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.5 All product is removed from operating area 5.6 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 5.7 Repair/adjustment is verified prior to resumption of operations
6. Clean and wash up printing machine at end of print run	6.1 Plates and pads are cleaned ready for next run 6.2 Inking system is washed up ready for next run, and liquid waste is disposed of according to company and regulatory requirements 6.3 Pre- and post-treatment units are cleaned ready for next run 6.4 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	3.1-3.3, 5.1, 5.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.7, 4.1, 4.4, 5.3, 5.6, 6.4	Enters routine data associated with production processes and enterprise procedures
Oral	3.1-3.3, 3.7, 4.1, 4.4,	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies

Communication	5.1-5.3, 5.6	
Numeracy	3.5	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1-1.6, 2.1-2.4, 3.1-3.4, 3.7, 3.8, 4.1-4.4, 5.1-5.4, 5.6, 6.1, 6.3, 6.4	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with others	3.1-3.3, 3.7, 4.1, 4.4, 5.1-5.3, 5.6	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.6, 2.1-2.4, 3.1-3.8, 4.1-4.4, 5.1-5.7, 6.1, 6.3	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Plans, identifies and assembles resources required to complete tasks - Responds to problems and applies formal problem solving processes when tackling unfamiliar problems - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN342 Produce complex pad printed product	ICPPR342C Produce complex pad printed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN342 Produce complex pad printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- operate a pad printing machine and produce TWO jobs (if possible on different substrates) ensuring an efficient non-routine production flow that maintains product quality standards in accordance with job specifications and enterprise procedures
- safely shut down and clean a pad printing machine according to work health and safety (WHS) guidelines
- demonstrate use of control, monitoring and data entry systems

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the major WHS concerns when operating the pad printing machine
- identify where Material Safety Data Sheets (MSDS) are stored and what information they contain
- explain how colour density of a light image on a dark substrate can be improved by selecting a different machine cycle mode
- describe special cycle modes available on the machine and their application
- explain how to determine if an ink has been mixed to the correct viscosity
- describe how to correct ink viscosity during production
- explain causes of unreleased ink remaining on the printing pad and how to identify them
- discuss how adding a catalyst affects the pot life of ink, and list other factors affecting pot life
- describe how to recognise a damaged pad
- outline the correct method of cleaning a pad during production
- discuss the effect of different pad shapes in multi-coloured printing for different colours

- explain how to determine time the ink should take to cure before scratch and adhesion tests can be performed
- outline how to check for correct pre-treatment of polypropylene during production
- describe how to ensure drying conditions are correct for the product
- describe visible effects on the image if ink viscosity is incorrect
- describe how to identify the cause of incorrect registration and prevent its recurrence
- explain what causes a fine coating of ink over the whole cliché surface
- identify machine manuals, safety and other documentation relevant to this task, where are they kept and the information contained.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- pad printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN382 Produce and manage complex digital print

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce and manage digital print in a complex print production environment by constructing and accessing complex electronic data, performing colour digital management and adjusting machine settings to ensure production and print quality are maintained.

It applies to individuals who possess a sound theoretical knowledge base, who typically provide leadership and use a range of specialised and technical skills in the commercial print, pre-press, bureau, high-end digital print or a combination of these business environments.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Troubleshoot and correct production workflows for digital printing	1.1 Productivity analysis on a digital production system is undertaken to determine the most productive approach according to job specifications 1.2 Workflow procedures for digital printing are developed according to equipment availability and production environment, for a range of job specifications

ELEMENT	PERFORMANCE CRITERIA
	1.3 Possible causes of problems in workflow procedures are identified and rectified, and strategies to improve productivity with minimum resource waste and according to job specifications are developed 1.4 Preventive maintenance on a digital printing system is undertaken according to manufacturer's specifications to ensure maximum productivity, and minimum downtime and wastage
2. Liaise with clients	2.1 Print services, quality expectations and print costing for digital printing are communicated to client according to enterprise procedures 2.2 Productivity advantages and disadvantages of different digital print options are communicated according to manufacturer's specifications and enterprise procedures 2.3 Turnaround times are calculated and communicated to client according to enterprise procedures
3. Confirm job specifications	3.1 Print job specifications are correctly interpreted from job documentation or production control system 3.2 Availability of all job components are checked according to enterprise procedures 3.3 Scanning, proofing and finishing requirements of each job are checked and internal workflow and/or outsource arrangements are coordinated 3.4 Run time of job is determined and completion time correctly estimated
4. Access, verify and submit electronic data files to a digital printer	4.1 Workstation computer and industry software are used to locate and retrieve electronic data files according to job specifications 4.2 Preview or pre-flight check is performed on electronic data files to verify correct job set-up according to job specifications 4.3 Job priority is determined according to job specifications and production schedules 4.4 Data file is submitted to print and image quality and machine productivity checks are performed and adjustments made to correct any problems
5. Perform complex digital colour management	5.1 Appropriate digital colour management solutions are used to minimise variation in colour selection, lighting conditions and surrounding colour, machine calibration, screen angle, machine resolution, conversion algorithms from red, green, blue (RGB) to cyan, magenta, yellow and key black (CMYK), substrate type and

ELEMENT	PERFORMANCE CRITERIA
	condition 5.2 Printed RGB, CMYK and PMS colour charts are used to perform colour matching with client proof 5.3 Accurate recommendations on colours to use when producing electronic data files are made according to job specifications 5.4 Colour matching of an electronic data file created using RGB colour model is performed by using machine calibration procedures and customising an output profile
6. Perform and/or coordinate document proofing	6.1 Digital proof run is conducted for client approval and to confirm proof meets job specifications 6.2 Internal or external pre-press proofing systems operators are consulted to conduct the proof run and provide job specifications according to enterprise procedures 6.3 Communication between client and proofing provider occurs to ensure proof conforms to job specifications
7. Run digital print job and/or coordinate press print run	7.1 Production schedules, enterprise procedures and job specifications are observed and liaison with internal and/or external production operators is maintained to determine print run start and duration time 7.2 Digital print run is conducted according to job specifications ensuring machine productivity and quality are monitored and adjusted throughout the print job
8. Perform and/or coordinate document finishing and client delivery	8.1 Finishing method is determined according to job specifications 8.2 Steps required for document finishing are identified and if necessary performed on in-line finishing units on a web or a sheet-fed system according to enterprise procedures 8.3 Packaging and presentation of finished print work is completed with co-workers and/or external source, if necessary, to avoid damage and conform to delivery requirements according to job specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance	Description

	Criteria	
Reading	1.1-1.4, 2.2, 3.1, 4.1-4.3, 5.3, 5.4, 6.1-6.3, 7.1, 7.2, 8.1-8.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	2.1-2.3, 6.3, 8.3	Enters routine data associated with production processes and enterprise procedures
Oral Communication	1.1-1.4, 2.1-2.3, 4.1-4.3, 5.3, 6.1-6.3, 7.1, 7.2, 8.1, 8.3	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	2.3, 3.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1-1.4, 2.1-2.3, 3.1, 3.3, 4.1-4.4, 5.1-5.4, 6.1-6.3, 7.1, 7.2, 8.1-8.3	- Works independently and collectively within broad parameters, with a strong sense of responsibility and ownership of goals, plans, decisions and outcomes - May seek to make implicit protocols and expectations more explicit, and may challenge those who appear to work against effective outcomes, or do not reflect stated values, decisions and outcomes
Interact with others	1.1-1.4, 2.1-2.3, 4.1-4.3, 5.3, 6.1-6.3, 7.1, 7.2, 8.1, 8.3	Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective group interaction, influencing direction and taking a leadership role on occasion
Get the work done	1.1-1.4, 3.3, 3.4, 4.1-4.4, 5.1, 5.2, 5.4, 6.1-6.3, 7.1, 7.2, 8.2, 8.3	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Takes responsibility for planning and organising own workload using analytical processes to decide on a course of action, and assembles required resources - Recognises and anticipates an increasing range of complex problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Reflects on the ways digital systems and tools are used, or could be used, to achieve work goals, and begins to recognise strategic, as well as operational, applications - Utilises a broad range of features within applications to improve personal productivity, optimising software functions for specific purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN382 Produce and manage complex digital print	ICPPR382C Produce and manage complex digital print	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN382 Produce and manage complex digital print

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate appropriate organisation skills to coordinate pre-press, print run, finishing and delivery production workflows
- produce and access complex electronic data
- conduct a digital proof run
- perform digital colour management
- adjust settings and ensure productivity
- perform preventive maintenance on digital printer
- demonstrate use of computerised control and monitoring systems if available and appropriate
- perform preventive maintenance tasks on a digital printer according to manufacturer's specifications
- prepare a written document outlining production workflow and giving reasons for production methods selected for a print job using the following job specifications within a specified production environment for:
 - 4-colour advertising brochure
 - quantity: 2000
 - substrate: 120gsm coated
 - text: supplied electronically
 - images: continuous tone photographs supplied
 - logos and line art: supplied electronically
 - layout: hand drawn thumbnails supplied
 - finished size: A3 bleed
 - finishing: guillotined, folded and saddle
 - packaging: boxed
- demonstrate turnaround time: 100 in 48 hours and remainder in 14 days
- produce a digital colour proof of a supplied electronic file
- use a digital colour management system to perform colour matching to a supplied proof.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Troubleshooting and problem-solving

- identify problem-solving strategies to use if a key piece of equipment in the production workflow is temporarily unavailable
- describe actions required if the substrate type required is unavailable
- discuss workarounds to use if a data file error is received while accessing a PDF file
- outline what to do if a busy production schedule with tight deadlines and a power failure coincides and appears to be for an indefinite period of time

Analyse and recommend printing solutions

- explain factors that influence a decision on using a particular printing solution (run length, substrate type, application)
- explain cost differences between a specified job printed on a digital system and a specified traditional system (eg digital vs lithographic)
- describe quality differences between a specified job printed on a digital system and a specified traditional system (e.g. digital vs lithographic)
- explain the difference in turnaround time between a specified job printed on a digital system and a specified traditional system (e.g. digital vs lithographic)
- discuss the most appropriate print method for the specified print job

Communication and client interaction

- outline main differences between digital printing and traditional printing methods
- discuss recommendations to make to a client who has created an electronic file in an incompatible software application
- discuss suggestions to make to a client who requires a high-volume print run but needs a portion of the print job immediately
- list steps to follow for client approval of a proof

Job requirements and processing systems

- name actions required if vital information is missing from the job ticket (manual or electronic)
- outline checks needed prior to set-up (availability of material, maintenance)
- discuss what action to take if a file does not transfer correctly
- describe main points to be checked before submitting file to print

Data access and manipulation

- list checks to ensure data is in a format that can be used in digital print
- outline suggestions to make to a client who has an incompatible version of software
- list ways to submit a PDF file to the digital printer

- explain OCR scanning
- discuss how scan resolution affects document size and quality
- describe what action is required if a scanned image is too dark
- outline the sort of scanner hardware and software configuration that can be used to digitally scan a hardcopy multi-page document with text and images

Digital colour management

- outline the difference between colours displayed on a computer monitor and printed colour
- describe how machine calibration affects colour consistency
- explain how to use printed colour charts to perform colour matching to a proof
- explain what the acronym ICC stands for, and its significance
- describe how a simulation profile affects colour output

Proofing and adjustment

- explain circumstances in which a job can be modified before printing
- discuss why margins should be changed when the job reaches the printer
- outline steps to get client approval of the print
- identify what the proof is checked against
- describe the type of proofing system available in the traditional pre-press
- explain recommendations that can be made regarding an appropriate proofing system for a specified print job

Document finishing and client delivery

- discuss various types of binding
- list procedures to be followed if the binding method required by the client is not available at own site
- describe why packaging finished print work is important.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- digital printing machine
- digital front end.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN383 Prepare for personalised digital printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up a digital printing press for personalised data printing.

This unit applies to individuals who possess a sound theoretical knowledge base and who typically provide leadership in the production of personalised digital print runs that involve setting data files and ensuring correct sequence.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify job specifications	1.1 Job details are checked and confirmed against job specifications 1.2 Correct materials are checked and are available for the job 1.3 Printing equipment is checked for efficiency and safely 1.4 Post-printing requirements are accurately identified according to job specifications 1.5 Correct data files are accessed and data conforms to job

ELEMENT	PERFORMANCE CRITERIA
	specifications
2. Set data requirements	2.1 Data files are set up to ensure required dynamic links operate correctly and settings conform to job specifications 2.2 Data is in correct sequence required for the run 2.3 Data is checked to ensure it is uncorrupted
3. Set machine quality	3.1 Work area is safe and ready for production 3.2 Digital printing machine is set to run efficiently and safely 3.3 Image is complete, sharp, of the required strength, free from contamination and in register 3.4 Output can be achieved at required quality standard and at required speed 3.5 Sample from the machine is produced and checked for conformance to job specifications 3.6 Adjustments are made where specifications are not met 3.7 If adjustments involve changes to materials, costs or time, supervisor or client are informed and approval secured 3.8 Set up is complete before deadline for the start of production

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.5, 2.1-2.3, 3.5, 3.6	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.7	Enters routine data associated with production processes and enterprise procedures
Oral Communication	1.1, 1.5, 2.1, 2.2, 3.5-3.7	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Navigate the world of work	1.1-1.5, 2.1, 2.2, 3.1-3.8	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for set-up, cleaning and maintenance of equipment, incorporating

		regulatory requirements and enterprise procedures
Interact with others	1.1, 1.5, 2.1, 2.2, 3.5-3.7	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.5, 2.1-2.3, 3.2, 3.3, 3.5-3.8	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and takes responsibility for addressing predictable, and some less predictable problems in familiar work contexts - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN383 Prepare for personalised digital printing	ICPPR383C Prepare for personalised digital printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN383 Prepare for personalised digital printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- manage and adjust digital data to conform to print requirements prior to digital printing and produce personalised digital print runs that involve setting data files and ensuring correct sequence.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- discuss how job requirements are established
- identify various information sources
- discuss appropriate set up required to run the printing machines safely and efficiently
- describe result prediction
- explain data interpretation
- outline data retrieval.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- digital printer.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN384 Set up and produce basic digital print

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up for and produce basic digitally printed product incorporating the use of raster image processor (RIP) technology when outputting to digital devices including wide format.

It applies to individuals working as print machinists in the printing and graphic arts industry who may set up, operate and monitor equipment and machinery and who may have to prepare material and apply solutions to problems. They may also provide leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Check components and functions of digital print system	1.1 Areas of user-replaceable consumables are checked and replacements made 1.2 Substrate feeding mechanisms and transport units are checked and cleared of any misfeeds 1.3 Correct set-up for data and electrical power is completed 1.4 Shutdown and restart procedures are performed according to

ELEMENT	PERFORMANCE CRITERIA
	manufacturer's specifications 1.5 Print driver and/or job download software are correctly installed and set-up on workstation computer and/or digital front-end processor
2. Maintain digital printing system to maximise productivity and quality	2.1 Routine maintenance tasks are performed according to manufacturer's specifications 2.2 Substrate transport and inking systems are cleaned to ensure optimum productivity and quality 2.3 Temperature and humidity conditions are checked to ensure even flow of substrate 2.4 Substrate registration mechanisms are checked to ensure alignment of printed images 2.5 Ink density calibration is performed on a digital print system to meet job specifications 2.6 Basic maintenance solutions to minimise ink residue, substrate misfeed, paper particle dust, uncalibrated systems and ink coverage are implemented
3. Maintain and perform optimum substrate handling procedures	3.1 Paper handling and storage system for a digital print environment are developed to maintain substrate integrity and digital image quality 3.2 Machine status is checked, print counters and consumable levels are reviewed and time estimated for reordering, servicing and reporting purpose
4. Confirm job specifications	4.1 Print job specifications are read and interpreted from job documentation or production control system 4.2 Availability of all job components are checked according to enterprise procedures 4.3 Finishing requirements of job are checked and internal workflow and/or outsource arrangements are coordinated according to enterprise procedures 4.4 Run time of job is calculated and completion time estimated, allowing consideration for other production demands
5. Set up reel system	5.1 Unwind reel is adjusted according to job specifications 5.2 Rewind reel is set up and adjusted according to job specifications 5.3 Minor in-line processes are set up and adjusted according to job specifications

ELEMENT	PERFORMANCE CRITERIA
6. Set up sheet transportation system on sheet-fed machine	6.1 Substrate is loaded into correct feeding mechanism and all substrate properties are correctly specified in the user control interface 6.2 Adjustments to the delivery unit are identified and made using the user control interface according to job specifications 6.3 On-line finishing unit is adjusted using the user control interface according to job specifications
7. Use RIP or front-end processor to set up job	7.1 Electronic data files are located and retrieved according to job specifications 7.2 RIP or front-end processor parameters are set according to job specifications 7.3 Preview or preflight check of electronic data files is performed to verify correct job set-up according to job specifications 7.4 Basic troubleshooting methods are applied to identify and rectify unverified data files, file errors and job requirement inconsistencies according to manufacturer's specifications
8. Submit data files to digital print machine	8.1 Job priority is determined according to job specifications and production schedules 8.2 Data file is submitted to print and image quality, and machine productivity checks are performed
9. Produce digital proof and run digital print job	9.1 Proof run is conducted to confirm proof conforms to job specifications and/or for client approval if required 9.2 Entire print run is conducted according to job specifications ensuring machine productivity and quality are monitored and rectified throughout the print job
10. Coordinate and/or perform document finishing and client delivery	10.1 Steps required for document finishing are identified if not performed on in-line finishing units on a reel or sheet-fed system according to job specifications 10.2 Finished print work is packaged to prevent damage and to conform to delivery requirements according to job specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.4, 2.1, 2.5, 4.1, 4.3, 5.1-5.3, 6.1-6.3, 7.1-7.4, 8.1, 9.1, 9.2, 10.1, 10.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	6.1, 9.1	Enters routine data associated with production processes and enterprise procedures
Oral Communication	1.4, 2.1, 2.5, 4.1, 4.3, 5.1-5.3, 6.2, 6.3, 7.1-7.4, 8.1, 9.1, 9.2, 10.1, 10.2	Applies appropriate strategies to extract main ideas from oral texts across a range of contexts
Numeracy	2.5, 3.2, 4.4, 7.2	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.3-1.5, 2.1, 2.2, 2.5, 2.6, 3.1, 4.2, 4.3, 5.1-5.3, 6.1-6.3, 7.1-7.4, 8.1, 8.2, 9.1, 9.2, 10.1, 10.2	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role, taking some responsibility for decisions regarding when and how to complete tasks, co-ordinate with, or delegate to others - Complies with OHS, legislative requirements and follows organisational policies and procedures relevant to own role - Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory and OHS requirements and enterprise procedures
Interact with others	1.4, 2.1, 2.5, 4.1, 5.1-5.3, 6.2, 6.3, 7.1-7.4, 8.1, 9.1, 9.2, 10.1, 10.2	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.5, 2.1-2.6, 3.1, 3.2, 4.2, 4.4, 5.1-5.3, 6.1-6.3, 7.1-7.4, 8.1, 8.2, 9.1, 9.2, 10.1, 10.2	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN384 Set up and produce basic digital print	ICPPRN384A Set up and produce basic digital print	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN384 Set up and produce basic digital print

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely set up and print FOUR basic digital printing jobs according to manufacturer's specifications, enterprise procedures and work health and safety (WHS) requirements
- correctly access data, adjust settings and ensure production speeds are attained using a RIP or front-end processor

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify workplace job ticket procedures and pre-printing set-up checks and procedures
- outline the process for file transfer actions, problems and solutions
- outline the process for determining selection of specific ink/toner for varied printed products and how to ensure ink/toner quality
- describe the process if required substrate is unavailable
- identify the maximum and minimum weight of a substrate that can be printed on a specific machine
- describe possible faults likely if printing on lightweight paper
- identify the availability of pre-prepared substrates for a specific machine
- identify the maximum delivery quantity for a specific machine
- outline possible problems encountered if incorrect feeding and delivery occurs
- name data formats used in digital print
- list benefits of using electronic data rather than scanning hardcopy, and various ways to submit a PDF file to a digital printer
- outline WHS procedures for setting up in-line processes

- describe in-line options available on a specific machine, and the on-line finishing options available
- outline processes for setting up in-line/on-line
- describe circumstances where a job would be modified before printing
- list steps involved for client approval of the print
- outline the proof check procedures
- outline processes involved for gaining final approval of a basic job
- list various types of binding and procedures followed if the binding method required by client is not available at this workplace
- outline alternative options if document size is too thick to staple
- identify importance of packing finished print work
- identify location of machine manuals, safety and other documentation relevant to set up and production of digitally printed products.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- RIP or front-end processor.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN385 Apply software applications to digital production

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to correctly select and use a variety of software applications to efficiently produce a standard job.

It applies to skilled individuals working in digital production who are responsible for digital production workflow and who apply a broad range of competencies in a varied work context. They use some discretion and judgement, and relevant technical knowledge, and provide technical advice and support to others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPSUP281	Use computer systems

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Select and assess	1.1 Publication requirements of layout brief are determined to

ELEMENT	PERFORMANCE CRITERIA
software	align with digital production processes and feasibility 1.2 Range of software applications is selected according to job specifications 1.3 Appropriate software applications are used to complete components of the job according to manufacturer's specifications and enterprise standards
2. Arrange elements on page	2.1 Client copy and images are assembled to conform to the design brief 2.2 Text is prepared and required fonts and font size are applied 2.3 Basic elements and images are created and arranged on the page to conform to the design brief 2.4 Image resolution and colour mode are determined according to job specifications, help function is accessed, if required, and solutions to queries found 2.5 Document set-up is completed to conform to the design brief and job specifications
3. Check quality	3.1 Text is reviewed for possible errors and omissions, and errors are discussed with client or supervisor 3.2 Basic elements are arranged to adhere with design principles 3.3 Copy is proofed and rechecked for errors, omissions and overall layout design 3.4 Necessary changes are made and reviewed and re-proofed as required 3.5 Job is saved according to enterprise procedures
4. Use RIP to output job	4.1 Layout is imported into a raster image processor (RIP) or front-end processor according to workplace procedures 4.2 Layout is produced according to job specifications and enterprise standards

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description

Reading	1.1-1.3, 2.1, 2.3-2.5, 3.1, 4.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	2.2, 3.1	Enters routine data associated with production processes and enterprise procedures
Oral Communication	3.1	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Navigate the world of work	1.1-1.3, 2.1-2.5, 3.5, 4.1, 4.2	Recognises and follows explicit and implicit protocols and meets expectations associated with own role
Interact with others	1.1-1.3, 2.4, 2.5, 3.1, 4.2	Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.2, 1.3, 2.1-2.5, 3.2-3.5, 4.1, 4.2	- Takes responsibility for planning and organising own workload making design choices as appropriate - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Utilises a broad range of features within applications to improve personal productivity, optimising software functions for specific purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN385 Apply software applications to digital production	ICPPR385A Apply software applications to digital production	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN385 Apply software applications to digital production

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly use TWO software applications to prepare and produce two different sets of layouts according to enterprise standards and job specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list different processes used in digital production
- describe colour modes and how they affect output
- outline how image resolution is governed by output resolution and/or viewing distance
- describe various software applications and their usages in relation to digital production
- identify how job specifications determine typeface selection and the effect typefaces have on readability
- explain design principles, such as hierarchy, emphasis, contrast, alignment, repetition and flow
- describe how to select and manipulate type within a layout application, and image manipulation techniques including basic colour correction
- describe how to create basic vector shapes with an application
- outline different colour modes and their uses
- outline preflighting procedures and various ways to import a job into a RIP
- identify location of manuals, safety and other documentation relevant to high-end software applications for digital production.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- RIP or front-end processor.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN386 Troubleshoot digital media

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to problem-solve failed digital media processes and products, involving logical systematic analysis to determine the source of a problem.

It applies to skilled individuals who may set up, operate and monitor equipment and machinery and who may have to prepare material and apply solutions to problems. They may also provide leadership and guidance to others, with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify substandard process performance	1.1 Operation of printing device is determined to manufacturer's specifications 1.2 Outputs are identified as consistent with normal operation by comparison to proofs, dummy copies or samples 1.3 Signs of equipment degradation and impending failure are identified and appropriate follow-up action is taken according to

ELEMENT	PERFORMANCE CRITERIA
	workplace procedures 1.4 Equipment outputs are inspected to determine nature of the problem 1.5 Nature of substandard performance is defined and reported
2. Identify causes of substandard performance	2.1 Causes of substandard performance are identified using a process for investigation 2.2 Records are reviewed to ensure the device had been maintained according to manufacturer's specifications 2.3 Calibration records are reviewed to ensure system is within calibration 2.4 Appropriate test procedure, materials and equipment are verified 2.5 Performance tests are conducted as appropriate to investigation 2.6 Equipment and/or testing variables are analysed to develop list of possible causes of substandard performance 2.7 Causes of substandard performance are isolated using the process for investigation
3. Propose corrective action	3.1 Corrective action is proposed and trialled based on investigation 3.2 Trial data is monitored to ensure outputs are consistent with normal operation 3.3 Trial results are reviewed to confirm validity of corrective action 3.4 Workplace records are maintained as required

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.2, 2.3, 3.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	1.5, 2.4, 3.4	Enters routine data associated with production

		processes and enterprise procedures
Oral Communication	1.1, 1.5, 2.2-2.5, 3.3	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	2.3, 3.2, 3.3	Interprets and analyses a range of mathematical information that is used in familiar and routine tasks
Navigate the world of work	1.1-1.3, 2.2-2.6, 3.2-3.4	Recognises and follows explicit and implicit protocols and meets expectations associated with own role including knowledge of work health and safety (WHS) requirements
Interact with others	1.1, 1.5, 2.2-2.5, 3.3	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.5, 2.1, 2.2, 2.5-2.7, 3.1, 3.2	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN386 Troubleshoot digital media	ICPPRN386A Troubleshoot digital media	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN386 Troubleshoot digital media

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly identify substandard printing performance for TWO different jobs and apply corrective solutions according to enterprise procedures and job specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline relevance and location of machine manuals, safety and other documentation, information included in these documents, and location of other sources of information
- identify output devices expected for printing performance on a particular substrate and how the same substrate can perform differently on various output devices
- explain how moisture can affect print quality and correct storage procedures for substrates
- describe different printing defects that can cause mis-calibration
- explain relevant problem-solving methodologies, including empirical, ishikawa and brainstorming
- identify relevant research techniques and online forums and networks that may assist.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN387 Use colour management for production

Modification History

Release	Comments
Release 2	This version released with ICP Printing and Graphic Arts Training Package Version 2.0. Version created to correct typographical error.
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to obtain an acceptable match across colour devices, including the correct use of colour profiles and calibration of monitors and output devices.

It applies to skilled individuals who set up, operate and monitor equipment and machinery, and who may have to prepare material and apply solutions to problems. They may also provide leadership and guidance to others, with limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPPRN284	Use colour management systems

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify colour requirements	1.1 Publication conditions are determined to identify colour management requirements 1.2 Requirements are established to guide provision and use of colour profiles
2. Calibrate digital devices	2.1 Digital devices in the workflow are calibrated to produce accurate colour reproductions 2.2 Device profiles created during calibration are correctly used and stored 2.3 Digital devices are checked regularly to ensure they are still within calibration 2.4 Profiles or equipment parameters are adjusted to bring devices back into calibration, when required 2.5 Records are stored to ensure calibration occurs regularly
3. Use colour profiles	3.1 Source and destination profiles are identified within the workflow 3.2 Profiles are used to ensure colour on monitors, proofs and final product match as closely as possible 3.3 Images are converted to correct profile if incorrect profile is embedded 3.4 Correct rendering intent is used to ensure accurate colour conversion
4. Configure software within workflow	4.1 In the workflow, software applications with colour management features are determined 4.2 Software applications with colour management features are configured to meet output condition 4.3 Range of colour management presets are configured, saved and correctly used for various output conditions
5. Maintain colour management workflow	5.1 Colour management system is checked regularly to ensure consistent colour match 5.2 Monitors are calibrated regularly to ensure accurate reproduction of colour 5.3 Digital devices are re-calibrated regularly or when conditions

ELEMENT	PERFORMANCE CRITERIA
	change from initial calibration

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	2.5	Enters routine data associated with production processes and enterprise procedures
Navigate the world of work	1.1, 1.2, 2.1-2.5, 3.1-3.4, 4.2, 4.3, 5.1-5.3	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Complies with work health and safety (WHS) and legislative requirements and follows organisational policies and procedures relevant to own role
Get the work done	1.1, 1.2, 2.1-2.4, 3.1-3.4, 4.1-4.3, 5.1-5.3	- Takes responsibility for planning and organising own workload, and assembles required resources - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Utilises a broad range of features within applications to improve personal productivity, optimising software functions for specific purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN387 Use colour management for production Release 2	ICPPRN387 Use colour management for production Release 1	Updated to correct typographical error	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN387 Use colour management for production

Modification History

Release	Comments
Release 2	This version released with ICP Printing and Graphic Arts Training Package Version 2.0. Version created to correct typographical error
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly produce THREE jobs with final product on varied media, including both print and digital platforms
- apply colour management system maintenance procedures according to enterprise procedures and job specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify work health and safety (WHS) issues related to managing colour for digital production
- define densitometric and spectrophotometric measurement
- define International Colour Consortium (ICC) profiles, their use and the effects they can have on output
- explain device independent colour and profile connection spaces
- outline use of colour space conversions and rendering intents
- describe factors that influence selection of highlight and shadow aim points
- explain grey balance requirements in relation to colour correction and the process of determining grey balance requirements
- describe ink/toner light errors – ‘ideal’ versus ‘actual’ inks/toners

- explain viewing light conditions and metamerism
- outline factors determining requirements for colour correction and how different stocks affect colour
- describe effects different inks have on colour reproduction for proofing and final production, and how dot gain affects colour
- identify type of press and what printing process is being used for final output
- describe solutions to common problems of colour management
- describe effects of using the wrong profile on output
- identify sources of information on colour management.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment and materials.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN388 Preflight and import complex images for digital devices

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to confirm that digital files required for the printing process are all present, valid, correctly formatted and of the desired format to be imported into a digital device. It includes the application of preflight procedures and importation of files into raster image processors (RIPs).

It applies to individuals who use specialised knowledge and follow organisational processes to ensure product quality meets requirements.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Access and preflight electronic files	1.1 Electronic data files are located and retrieved using a workstation computer and industry software according to job specifications 1.2 Preflight check of electronic data files is performed to verify correct job set-up according to job specifications, and problems associated with files are identified

ELEMENT	PERFORMANCE CRITERIA
	1.3 Troubleshooting methods are applied to identify file errors and job requirement inconsistencies 1.4 Solutions are implemented to rectify errors according to job specifications 1.5 Preflight presets are configured for various job specifications
2. Import file to RIP or job queue	2.1 Correct output profile is selected according to job specifications 2.2 Most productive submission workflow is selected and documented based on data file format, quantity and file size, and document finishing 2.3 Job priority is determined according to job specifications and production schedules 2.4 Print driver and/or job download software is correctly installed and set up on workstation computer and/or digital front-end processor 2.5 Manufacturer's installation instructions are located and/or software installation is coordinated according to enterprise procedures 2.6 Data file is submitted to output device, image quality and machine productivity checks are performed, and adjustments made to correct any problems

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.4, 1.5, 2.1, 2.3, 2.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	2.2	Enters routine data associated with production processes and enterprise procedures
Oral Communication	1.1, 1.2, 1.4, 1.5, 2.1, 2.3, 2.5	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Navigate the	1.1-1.5, 2.1-2.6	Recognises and follows explicit and implicit protocols and meets expectations associated with own role

world of work		
Interact with others	1.1, 1.2, 1.4, 1.5, 2.1, 2.3, 2.5	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.5, 2.1-2.6	- Takes responsibility for planning and organising own workload, and assembles required resources - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Utilises a broad range of features within applications to improve personal productivity, optimising software functions for specific purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN388 Preflight and import complex images for digital devices	ICPPRN388A Preflight and import complex images for digital devices	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN388 Preflight and import complex images for digital devices

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- import electronic files that are error-free and meet job specifications into rips or output queues
- find and use information relevant to the task from a variety of information sources
- preflight and import TWO complex jobs according to manufacturer's specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify and describe key digital printing processes
- outline required resolution for various output conditions
- describe different colour modes and how they affect output
- explain trapping and overprint requirements
- identify and describe different screen types and angles
- outline bleed amounts required for various jobs
- explain the impact font types and licensing can have on output
- describe preflighting tools available in various applications
- compare different file types and how they can affect output
- outline factors that influence processing speed of a job during ripping
- explain how the ripping speed of a job can be increased.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- high-end computers
- raster image processors (RIPs)
- output devices
- layout software.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN389 Manage digital files

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to store and retrieve electronic files for efficient access.

It applies to individuals who work under limited supervision in the application of digital file management.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Save digital files	1.1 Logical digital file system of folders and sub-folders is created and files are named using enterprise format 1.2 Files are saved using appropriate format into digital file system 1.3 Version control is used to ensure the most recent files can be accessed
2. Retrieve and manage digital files	2.1 Required files are retrieved and opened from digital file system 2.2 Computer search functions are used to find incorrectly stored files

ELEMENT	PERFORMANCE CRITERIA
	2.3 Files are sent to required location and any naming errors are amended
3. Archive digital files	3.1 Archive system is created according to enterprise protocols 3.2 Consistent, regular backup strategies are undertaken to allow for retrieval of files if there is a data loss event 3.3 Files are retrieved from archive system

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1-2.3, 3.1-3.3	Uses a number of reading strategies to identify and interpret relevant information within familiar text types
Writing	1.1-1.3, 3.1	Enters routine data associated with production processes and enterprise procedures
Navigate the world of work	1.1, 1.2, 2.1, 2.3, 3.1, 3.2	Recognises and follows explicit and implicit protocols and meets expectations associated with own role evaluating effectiveness of decisions on how well they met stated goals
Get the work done	1.1-1.3, 2.1-2.3, 3.1-3.3	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Utilises a broad range of features within applications to improve personal productivity, optimising software functions for specific purposes - Manages and maintains files securely in a variety of storage media and formats

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN389 Manage digital files	ICPPRN389A Manage digital files	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN389 Manage digital files

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- store, retrieve and archive various file types
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list work health and safety (WHS) factors for using a computer
- point out the location of manuals, safety and other documentation relevant to digital file management procedures and discuss the contained information
- explain elementary computer operating system functions
- discuss file hierarchy
- outline advantages and disadvantages of different file systems
- explain file size and how it impacts on hard drive space
- identify different file types and how this relates to file size
- explain how to rename a file
- outline version control procedures
- discuss operating systems' search function
- explain backup processes
- outline how to achieve different formats.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- high-end computers
- network hard drives
- external hard drives
- DVDs
- BluRay discs.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN390 Generate a proof for digital production

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to generate a proof on the printing device to be used for final production.

It applies to individuals who generate and approve proof in the digital sector.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Produce proof on printing device	1.1 Printing device is calibrated according to manufacturer's specifications 1.2 Appropriate colour profiles are selected to ensure consistent colour output 1.3 The same substrate or product is used to generate a proof for the final production run 1.4 Proof is produced according to job specifications and workflow procedures 1.5 Proof is used to make a mock-up to simulate the finishing of

ELEMENT	PERFORMANCE CRITERIA
	the final product according to job specifications
2. Assess proof against specifications	2.1 Proof is checked against job specifications to confirm validity and identify and rectify any defects 2.2 Proofing process is repeated if proof does not meet job specifications and enterprise standards
3. Communicate proof with client	3.1 Proof is labelled with appropriate information according to enterprise standards 3.2 Feedback is gained from client for sign off 3.3 Amendments are made if required, and resubmitted to client for sign off 3.4 Proof is stored according to workplace procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.4, 1.5, 2.1, 2.2, 3.4	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.1-3.4	Enters routine data associated with production processes and enterprise procedures
Oral Communication	1.1, 1.4, 1.5, 2.1, 2.2, 3.2	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Navigate the world of work	1.1-1.5, 2.1, 2.2, 3.1-3.4	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for regulatory requirements including work health and safety (WHS) and enterprise procedures
Interact with others	1.1, 1.4, 1.5, 2.1, 2.2, 3.2	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work	1.1-1.5, 2.1, 2.2, 3.1,	Determines priorities and sequences steps involved in

done	3.3, 3.4	clearly defined, familiar tasks • Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts • Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN390 Generate a proof for digital production	ICPPRN390A Generate a proof for digital production	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN390 Generate a proof for digital production

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely calibrate a digital device to ensure consistent colour output
- produce a proof that gains client approval and matches the final production run
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list work health and safety (WHS) issues related to digital proofing for digital production
- explain colour theory, including additive and subtractive colours, red, green, blue (RGB) and cyan, magenta, yellow, black (CMYK)
- outline varying colour gamuts between colour modes
- discuss colour management workflow set-up procedures
- describe use of output profiles in relation to simulation
- explain how regular calibration helps ensure consistent colour output
- describe quality control systems used in proofing
- outline techniques used to control quality
- explain how to use standard viewing conditions to assess colour output
- describe how to use colour evaluation charts
- outline criteria for evaluating a colour proof
- explain differences between preliminary proofs and a contract proof
- identify types of substrates used in proofing
- name the inks, toners and coatings used in digital printing
- describe how to handle and store materials to ensure quality

- identify types of finishing techniques used in digital production
- point out the location of relevant manuals, safety and other documentation relevant to digital printing, and discuss the information in these documents
- discuss where other available sources of information are.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- high-end colour output devices
- raster image processors (RIPs) with colour management features.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN392 Set up and produce specialised digital print

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up for and produce specialised, digitally printed products. This unit includes the use of non-standard substrates and raster image processor (RIP) settings.

It applies to individuals who evaluate job specifications, set up raster image processor (RIP) settings and produce specialised print jobs.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm specialised job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Availability of all job related components is checked and recorded
2. Plan and carry out specialised set-up	2.1 Specialised job specifications are identified and analysed 2.2 Specialised set-up requirements are determined 2.3 Specialised set-up is completed in minimum time and with

ELEMENT	PERFORMANCE CRITERIA
	minimum wastage
3. Set up RIP for specialised digital printing	3.1 RIP functions are analysed to determine appropriate settings according to specialised job requirements 3.2 Experimentation is undertaken with RIP functions to determine settings according to specialised job requirements 3.3 Problems are solved effectively to minimise waste and excess costs 3.4 Documentation and other forms of information are accessed to determine source of any problems 3.5 Most productive way to complete the job is determined
4. Test and select substrate	4.1 Substrate specifications are investigated to determine print feasibility 4.2 Test print run is conducted to confirm substrates appropriateness with job requirements 4.3 Appropriate substrate is selected based on print feasibility and job requirements
5. Conduct specialised proof run	5.1 Material to be used for specialised proof is organised correctly 5.2 Machine is operated according to manufacturer's specifications and enterprise procedures to produce a specialised proof 5.3 Specialised proof is visually inspected to enterprise procedures 5.4 Client approval or authority is sought prior to production run where appropriate 5.5 Results are interpreted and adjustments are carried out according to product and machine specifications
6. Refine and document specialised print process	6.1 Corrective or preventive action is recommended and implemented where appropriate 6.2 Changes are communicated to relevant personnel in a logical and easily understood manner 6.3 Changes are monitored to confirm improvement to production efficiency 6.4 Ongoing problems are reported according to enterprise procedures, and process is documented according to enterprise standards 6.5 Documentation is filed so it can be easily retrieved and used as a reference for future, similar jobs

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 2.2, 3.1, 3.2, 4.1, 5.2, 5.5, 6.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	1.2, 5.4, 6.4	Enters routine data associated with production processes and enterprise procedures
Oral Communication	1.1, 2.1, 2.2, 3.1, 3.2, 4.1, 5.2, 5.4, 5.5, 6.2, 6.4	Speaks clearly using appropriate vocabulary, tone and pace to communicate
Numeracy	4.1	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1, 2.1-2.3, 3.1-3.3, 4.1-4.3, 5.2-5.5, 6.3, 6.4	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Complies with WHS, legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	1.1, 2.1, 2.2, 3.1, 3.2, 4.1, 5.2, 5.4, 5.5, 6.2, 6.4	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.2, 2.3, 3.1-3.5, 4.2, 4.3, 5.1-5.3, 5.5, 6.1, 6.3	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems - Enters key words into a search engine to find information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN392 Set up and produce specialised digital print	ICPPRN392A Set up and produce specialised digital print	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN392 Set up and produce specialised digital print

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- analyse job specifications and develop practical solutions to printing a non-standard product
- safely set up and use a raster image processor (RIP) and digital printing machine for a specialised job on TWO occasions according to manufacturer's and job specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- name who to discuss any production problems with
- describe all functions and settings available on a particular RIP or front-end processor
- explain advanced RIP settings, such as dynamic variables to select stock
- explain where to source information on complex raster image processor RIP usage
- discuss types of substrates suitable for various digital processes
- explain the theory behind several digital processes and how this impacts substrate usage
- outline problem-solving methodologies, including empirical, ishikawa and brainstorming
- name online forums and networks which might be useful points of reference for this role
- list work health and safety (WHS) issues in relation to each digital process
- show where documentation or other information can be found on specialised digital processes.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- full colour production digital presses or specialised wide format printers.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN393 Set up for basic relief printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely set up reel-fed or sheet-fed platen, cylinder or rotary printing machines, and conduct a proof run for basic relief printing.

It applies to individuals who prepare material, monitor and run equipment and machinery, and apply solutions to a defined range of unpredictable problems. They may also provide leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage, and availability of all job related components is checked
2. Set up reel system	2.1 Unwind and rewind reels are set up and adjusted according to job specifications 2.2 Webbing procedures are carried out and web-control system is

ELEMENT	PERFORMANCE CRITERIA
	set up and adjusted according to job specifications 2.3 Reels are spliced/joined according to job specifications 2.4 Printed web viewing devices are set up and adjusted according to job specifications 2.5 Folder and sheets are set up and adjusted according to job specifications 2.6 Set off / marking prevention devices are set up and adjusted according to job specifications
3. Set up sheet transportation system on sheet-fed machine	3.1 Feeder and delivery sections are set up and adjusted according to job specifications 3.2 Sheet pick-up and transportation systems are set up and adjusted according to job specifications 3.3 Transfer and control systems are set up and adjusted according to job specifications 3.4 Set-off / marking prevention devices are set up and adjusted according to job specifications 3.5 Substrate is added to and removed from process according to job instructions
4. Select and prepare inks and additives	4.1 Quality and suitability of inks, dyes or additives are selected according to job specifications and end-user requirements 4.2 Quality and suitability of inks, dyes or additives are checked and appropriate action is taken 4.3 Inks, dyes and additives are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 4.4 Correct colour and weight/volume of ink are mixed and prepared to match requirements of the printing process and job specifications 4.5 Formulation of ink, colour match and approved colour are appropriately recorded 4.6 Inks, dyes and additives are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions to prevent damage and hazards to personnel and to prolong shelf life
5. Select and prepare embellishment dyes	5.1 Quality and suitability of dyes are selected according to job specifications and end-user requirements 5.2 Dyes are prepared according to WHS requirements and manufacturer's/supplier's instructions, with suitable precautions to

ELEMENT	PERFORMANCE CRITERIA
	minimise waste 5.3 Dyes are appropriately labelled, handled and stored according to manufacturer's/suppliers instructions to prevent damage and hazards to personnel and to prolong shelf life 5.4 Impression is set up and adjusted according to job specifications (platen and rotary) 5.5 Inking system is set up and adjusted according to the relief process and job specifications (platen and rotary) 5.6 Drying system is set up and adjusted according to job specifications
6. Set up machine for basic relief printing	6.1 Appropriate relief plates are selected and secured to the machine 6.2 Relief plates, formes or cylinders are positioned, set up and adjusted according to job specifications (platen and rotary) 6.3 Impression is set up and adjusted according to job specifications (platen and rotary) 6.4 Inking system is set up and adjusted according to relief process and job specifications (platen and rotary) 6.5 Drying system is set up and adjusted according to job specifications
7. Set up machine for basic embellishment	7.1 Appropriate dyes are selected and secured to the machine 7.2 Dyes are positioned and set up and adjusted according to job specifications (platen and rotary) 7.3 Impression is set up and adjusted according to job specifications (platen and rotary)
8. Conduct proof run	8.1 Material to be used for proof is organised correctly 8.2 Machine is operated according to manufacturer's and enterprise procedures to produce specified proof 8.3 Proof is visually inspected and/or tested or laboratory testing organised according to enterprise procedures 8.4 Client approval or authority is sought prior to the production run where appropriate 8.5 Results are interpreted and adjustments are carried out according to product and machine specifications to determine adjustment requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1-2.6, 3.1-3.5, 4.1, 4.3, 4.4, 4.6, 5.1-5.6, 7.2, 7.3, 8.3, 8.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	4.5, 4.6, 8.4	Enters routine data associated with production processes and enterprise procedures
Oral Communication	2.1-2.6, 3.1-3.5, 4.1, 4.3, 4.4, 5.1, 5.4-5.6, 7.2, 7.3, 8.3, 8.4	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	3.5, 4.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1, 1.2, 2.1-2.6, 3.1-3.5, 4.1-4.6, 5.1-5.6, 6.1, 6.2-6.5, 7.1-7.3, 8.1-8.5	Recognises and follows explicit and implicit protocols and meets expectations associated with own role
Interact with others	2.1-2.6, 3.1-3.5, 4.1, 4.3, 4.4, 5.1, 5.4-5.6, 7.2, 7.3, 8.2-8.4	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1, 1.2, 2.1-2.6, 3.1-3.5, 4.1-4.4, 4.6, 5.1-5.6, 6.1, 6.2-6.5, 7.1-7.3, 8.1-8.3, 8.5	- Takes responsibility for planning and organising own workload and assembles required resources - Recognises and takes responsibility for addressing predictable problems in familiar work contexts, adjusting resources and equipment as required - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN393 Set up for basic relief printing	ICPPR393A Set up for basic relief printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN393 Set up for basic relief printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up reel- or sheet-fed platen, cylinder or rotary printing machines for routine print jobs
- conduct proof run and adjust settings to ensure production speeds are attained
- use computerised control, monitoring and data entry systems if available and appropriate
- find and use information relevant to the task from a variety of information sources
- demonstrate all safety devices on the machine
- manipulate embellishment tools and operations
- set up for TWO basic relief printing jobs (if possible including at least one in-line process) according to manufacturer's specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Job specifications

- explain what to do if vital information is missing from the job ticket
- outline checks to do prior to set-up

Relief plates

- explain effect of plates with poor relief
- explain importance of calliper of mounting material
- explain how to position plate on the mount ensuring plate edges do not lift

Reel in-feed

- outline major work health and safety (WHS) concerns when setting up the reel in-feed
- explain how to determine printing side of the material

- outline effects of low web tension on the print
- explain other types of web splices that can be used appropriately for the job

Sheet in-feed

- outline major WHS concerns of setting up the sheet in-feed
- explain how sheet position is determined for the job
- outline effects that side lay selection has on the job
- explain how to appropriately select front lays
- list procedures for a register check
- explain why a two-sheet cut is used on most feeders
- explain how the machine knows if the sheet is missing or late

Reel only delivery system

- explain effects of excessive web tension at rewind of the machine
- outline major risks associated with rewind of the machine

Sheet only delivery system

- explain why application of spray powder is sometimes advisable
- list effects of too much spray powder
- explain the use of slowdown devices in the delivery
- outline effects of excessive jogging on the stack

Preparation of inks and additives

- outline main environmental and WHS concerns about inks and additives
- explain how to match ink to a particular job
- outline results of ink being too tacky
- explain the process for changing ink that is too light
- outline methods available to check ink for correct colour
- explain responsibility for passing the colour prior to running the job

Machine set-up

- outline WHS concerns of setting up the machine
- explain how to determine specifications relating to the specific job
- explain effects incorrectly set inking rollers have on the print
- outline ways the ink profile may vary across the machine
- explain what 'optimum ink duct sweep' refers to

Basic in-line processes

- outline precautions to take if UV drying is to be utilised to dry the ink film
- list steps to incorporate in-line processes into the make ready
- explain how equipment used in in-line processing can be protected against damage during set-up

Proofing and adjustment

- outline methods to minimise waste during make ready
- list procedures to be adopted to have the print approved

- list quality control measurements applied to the print to test against known standards
- outline checks on the initial print prior to running
- explain how settings to be adjusted are determined
- summarise the process to plot success of the machine adjustment
- summarise how to record final results for future reference

Source information

- outline a range of information sources relevant to basic relief printing.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- reel- or sheet-fed platen
- cylinder or rotary printing machines
- machine manuals, safety and other documentation relevant to basic relief printing.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN394 Produce complex relief printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely operate, monitor and clean a platen, cylinder or rotary printing machine using an efficient non-routine production flow.

It applies to skilled individuals working as print machinists in the printing and graphic arts industry who set up, operate and monitor equipment and machinery, and who may have to prepare material and apply solutions to problems. They may also provide leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain non-routine operation of reel system	1.1 Reel stand and rewind section are monitored and adjusted to maintain correct tension, avoid marks, blemishes or damage to finished product, and to ensure efficient continuous operation 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation 1.3 Substrate is added to and removed from the process according

ELEMENT	PERFORMANCE CRITERIA
	to job instructions 1.4 Sheeting section is monitored and adjusted to ensure quality and efficient product delivery 1.5 Set-off / marking prevention system is monitored and adjusted to ensure quality of the printed product meets the approved proof standard
2. Maintain operation of sheet system	2.1 Feeder and delivery are monitored and adjusted to ensure continuous and efficient feed to machine 2.2 Sheet pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation 2.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation 2.4 Substrate is added to and removed from process according to job instructions
3. Maintain complex relief printing process	3.1 Relief polymer forme or plate cylinder condition is monitored and adjusted to ensure quality of the printed product meets the sample sheet standard 3.2 Relief polymer impression surface condition is monitored and adjusted to ensure quality of the printed product meets the sample sheet standard 3.3 Relief polymer inking system is monitored and adjusted to ensure quality of the printed product meets the sample sheet standard 3.4 Drying systems are monitored and adjusted to ensure quality of the printed product meets the approved proof standard
4. Maintain production process	4.1 Production process is operated in association with fellow workers and according to company specifications and planned daily schedule 4.2 In-line printing/converting/binding/finishing processes are monitored and adjusted to ensure quality of the product meets the approved proof standard 4.3 Production is maintained within work health and safety (WHS) requirements and company and manufacturer's specifications 4.4 Manual and/or automatic control is used according to specification 4.5 Performance is monitored and verified using the process control system according to enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
	4.6 Ink performance, colour, register and embellishment of print are monitored and adjusted throughout production run 4.7 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 4.8 Process adjustments to eliminate problems are reported according to enterprise procedures 4.9 Faulty performance of equipment is identified and reported according to enterprise procedures 4.10 Waste is sorted according to enterprise procedures
5. Identify and rectify problems	5.1 Problems in relief machine operation are identified and reported according to enterprise procedures 5.2 Faulty performance of equipment is identified and reported according to enterprise procedures 5.3 Adjustments or corrections are carried out according to specified procedures 5.4 Relief machine operation is checked to ensure correct operation
6. Conduct shutdown of production process	6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 6.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 6.3 Unused ink is correctly labelled and stored according to manufacturer's/supplier's specifications and enterprise procedures 6.4 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 6.5 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 6.6 Repair/adjustment is verified prior to resumption of operations
7. Clean and wash up printing machine at end of print run	7.1 Cylinders, plate and roller surfaces are cleaned ready for next run 7.2 Inking system is washed ready for next run, and liquid waste is disposed of according to company and regulatory requirements 7.3 In-line printing/converting/binding/finishing units are cleaned ready for next run 7.4 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run

ELEMENT	PERFORMANCE CRITERIA
	7.5 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run 7.6 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 2.4, 4.1, 4.3, 4.4, 6.1, 6.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	4.8, 4.9, 5.1, 5.2, 6.3, 6.5, 6.6, 7.6	Enters routine data associated with production processes and enterprise procedures
Oral Communication	1.3, 4.1, 4.3, 4.4, 4.8, 4.9, 5.1, 5.2, 6.1-6.3, 6.5, 6.6	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Numeracy	1.3, 2.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.4, 1.5, 2.1-2.4, 3.1-3.4, 4.1-4.10, 5.1-5.4, 6.1-6.5, 7.1-7.6	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with others	1.3, 4.1, 4.3, 4.4, 4.8, 4.9, 5.1, 5.2, 6.1-6.3, 6.5, 6.6	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.5, 2.1-2.4, 3.1-3.4, 4.1-4.10, 5.1-5.4, 6.1-6.6, 7.1-7.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Follows routine procedures for using digital

		technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN394 Produce complex relief printed product	ICPPR394A Produce complex relief printed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN394 Produce complex relief printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- accurately monitor production output and make necessary adjustments to maintain print quality on a relief printing machine while producing a complex print on TWO occasions (if possible using different substrates and at least two in-line processes) according to job specifications, enterprise procedures and work health and safety (WHS) requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline major WHS concerns of setting up the reel transportation system
- describe possible causes of reel wandering and web breaks at the unwind unit
- outline print faults resulting from the reel being run out of centre
- outline major WHS concerns of setting up the sheet transportation system
- identify the result of worn suckers at the feeder suction head
- describe the two-sheet detection on the machine, and the amount of movement the sheet should have when being registered by the side lay
- outline possible causes of mis-register of the sheet feeder and visible signs of the sheet being registered in the feeder
- describe a gripper malfunction of sheet control and transfer, and the sheet transfer mechanisms that require adjusting
- identify causes of the feeder stack becoming uneven, and the result if the feeder stack not loaded level
- describe the process of reel delivery for rewinding and sheeting and the associated WHS risks

- list the safety feature in the delivery system if the web jams up, and reasons for sheet cut-off wander
- describe the effect of poorly adjusted nip rollers when rewinding and sheeting
- outline the effect machine speed has on sheet delivery, and the advantage of spraying moving sheets with anti-set-off powder in delivery
- outline items in the delivery that can cause marking on the printed image, and remedial steps necessary to eliminate marking
- outline faults from incorrectly set grippers in the transfer section of a machine, and devices to adjust to maintain sheet control in the delivery
- identify the result if the plate lifts at the grip edge during a print run, and build-up of ink on the impression cylinder affecting printed product
- list possible causes of ink leaking back in the duct
- outline the problem of paper surface picking being rectified
- identify causes of diminished impression during the print run
- identify causes of plate surface prematurely wearing during production
- describe possible issues if eating or drinking near the machine when using UV inks
- identify link between driers and set-off and marking, and what causes UV ink to dry
- identify causes of substrate blistering and the effect of incorrect drying temperature on finished product
- outline major WHS concerns when operating cutting devices, and importance of checking consistency of the cutting and creasing unit
- identify the result of excessive pressure on the slitters, and the benefit of die cutting using a rotary die
- outline advantages of using a perforation wheel to perforate
- describe the effect of inadequate communication within the work team on a relief printing machine
- describe importance of safety features within organisation and in maintaining effective production
- identify ramifications if machine guards are removed and/or micro switches are disconnected on a machine
- explain legal responsibility for removal of machine guards and/or disconnection of micro switches
- identify measurement other than optimum solid ink density that can be used to assess print quality
- identify the most accurate method of checking register during a production run
- explain actions to take when production problems are anticipated and to eliminate further processing of unacceptable printed product
- describe the effect on a stack of paper if relative humidity is increased in the press room, and the procedure to care for a newly delivered skid of paper to the press room
- explain reasons for sorting waste and advantages of keeping reusable waste
- explain industry standards to enhance effective communication with clients and necessary procedures clients should follow to approve a printed product
- explain when it is necessary to call service personnel to correct a machine problem
- outline enterprise procedures to report any machine operating problems

- describe the result if correct shutdown procedures are not followed, and correct shutdown procedures to be followed with fellow workers
- explain advantages of proper labelling and storage of excess inks and materials
- explain importance of clearly labelling printed product prior to removal from the press room
- explain WHS requirements for handling ink and cleaning printing cylinders
- explain cleaning and washing techniques for the printing unit prior to the next print run and procedures for storing plates so as to minimise damage
- outline WHS precautions for cleaning the feed, transportation, delivery and in-line sections of the machine
- explain importance of maintaining a clean substrate handling section of the machine
- explain importance of completing records used in final analysis of the job, and benefits for future jobs
- identify machine manuals, safety and other documentation relevant to the production of complex relief printed products and other sources of relevant information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN411 Mount and demount flexographic plates for complex printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to mount and demount flexographic plates for non-routine printing.

It applies to individuals working in the printing and graphic pre-press sector of the printing and graphic arts industry. They design layouts and assemble text and graphics into page formats for printing, and set up, monitor and operate equipment and machinery as well as apply solutions to a defined range of problems associated with the print medium, and analyse and evaluate information from a variety of sources. They may also provide leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm non-routine job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is planned and carried out correctly in minimum time with minimum wastage

ELEMENT	PERFORMANCE CRITERIA
	1.3 Prior inspections are completed and signed off
2. Prepare flexographic plates	2.1 Plate height is measured according to non-routine job specifications 2.2 Plates are trimmed and prepared according to mounting system requirements 2.3 Mounting adhesive is selected to achieve correct Pitch Circle Diameter (PCD) of specified plate cylinders and gears
3. Prepare plate cylinder	3.1 Plate cylinders/seamless sleeves are selected, cleaned and prepared and correct gears are mounted OR 3.2 Sleeves and correct gears on mandrels are selected, cleaned, prepared and mounted to meet non-routine job specifications 3.3 Total Indicated Runout (TIR) is checked to be within specified tolerances on plate cylinders 3.4 Selected mounting adhesive is applied to plate cylinders
4. Mount and demount flexographic plates on mounting/proofing machine	4.1 Plates are prepared and mounted on cylinders using pin mounts or microdot systems or sleeves according to chart number/print direction OR 4.2 Plate mounting sheet is prepared to meet non-routine job specifications 4.3 Plates are mounted to position on plate mounting sheet or camera targets 4.4 Plate mounting sheet is installed and tensioned onto plate cylinder to specified chart number/print direction 4.5 Correct cleaning solution and brush is used to clean plate 4.6 Correct tools are used to demount plate without damaging plate 4.7 Plate is visually checked for damage 4.8 Plate is prepared for storage and then stored correctly according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 3.2, 4.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	1.3	Completes workplace forms accurately
Numeracy	2.1, 2.2, 2.3, 3.3, 4.1, 4.4	Uses simple mathematical calculations and arranges sequential numerical information
Navigate the world of work	4.8	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Get the work done	1.1-1.3, 2.1-2.3, 3.1-3.4, 4.1-4.8	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency and assembles required resources - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment - Reads data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN411 Mount and demount flexographic plates for complex printing	ICPPR411C Mount and demount flexographic plates for complex printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN411 Mount and demount flexographic plates for complex printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare and mount flexographic plates and plate cylinders for complex printing to meet job specifications, including checking registration if necessary
- mount and demount plates and install in a flexographic printing machine for a variety of different complex print jobs on TWO occasions according to job specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the need to ensure job specifications are read and properly understood
- describe production problems that could be created by not reading or understanding the job specifications
- identify who to discuss any production problems with
- list work health and safety (WHS) concerns of mounting and demounting plates
- describe the most common cause of photopolymer plates crazing on the image side
- explain the importance of printing plate resiliency
- list the main advantage of using thin photopolymer plates in process printing
- outline faults that may be detected on new plates
- identify type of solvents used on photopolymer plates
- describe benefits of optical mounting
- explain the purpose of binding plates after mounting
- outline possible print faults that could be eliminated by using cushion mount
- describe the result of air being trapped under plates
- explain how to select the correct cushion mount for a particular job

- explain how to eliminate low spots
- explain how to minimise press bounce in jobs that are mounted more than one across
- list some possible causes of print slur
- explain how to prevent or minimise plate lifting
- explain the method used to make registering the job easier on the press
- locate machine manuals, safety and other documentation relevant to this task, and explain the information contained in them
- identify other sources of available information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN413 Set up for complex flexographic printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up machines for non-routine flexographic printing. It includes the ability to conduct a proof run and adjust settings to ensure production speeds are attained.

It applies to individuals working as print machinists in the printing and graphic arts industry. They prepare material, set up, monitor and operate equipment and machinery, apply solutions to a defined range of problems associated with the print medium, and analyse and evaluate information from a variety of sources. They may also provide leadership and guidance to others with some limited responsibility for the output of others.

Mounting and demounting plates is covered in ICPPRN411 Mount and demount flexographic plates for complex printing.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm non-routine job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system

ELEMENT	PERFORMANCE CRITERIA
	1.2 Set up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked 1.4 Proofed job is checked for conformance with job specifications
2. Set up reel transportation and delivery system on web-fed machine	2.1 Reels are checked for treatment levels, coatings and printing side, and age of product 2.2 Unwind reels are secured on reel shaft 2.3 Reels are correctly positioned on unwind stand 2.4 Press is webbed for surface or reverse or perfecting printing according to non-routine job specifications 2.5 Edge guide is centred and set to non-routine job specifications 2.6 Unwind tension is set to suit substrate 2.7 Rewind tension is set to suit substrate 2.8 Positively Infinitely Variable (PIV) drive is set for appropriate tensioning of substrate
3. Select and prepare inks and solvents	3.1 Inks and solvents are selected according to job specifications and end-user requirements 3.2 Quality and suitability of inks and solvents are checked and appropriate action is taken 3.3 Inks and solvents are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 3.4 Correct colour and weight/volume of ink are mixed and viscosities checked and modified according to press requirements and non-routine job specifications 3.5 Ink formula and approved colour draw-downs are appropriately recorded 3.6 Inks and solvents are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions and relevant hazardous liquids storage regulations
4. Set up machine for complex flexographic printing	4.1 Flexographic plate cylinders are installed, and register adjustments centred OR 4.2 Sleeves are installed in press and register adjustments made OR 4.3 Plate mounting sheets are mounted on cylinders in press and

ELEMENT	PERFORMANCE CRITERIA
	register adjustments made 4.4 Plate cylinders are gauged up or pre-set to impression 4.5 Anilox rollers are selected to suit individual colour and plate reproduction requirements for each unit 4.6 Appropriate ink metering system is selected for each unit 4.7 Inking system is set up and roller nips/blades are set correctly 4.8 Ink circulation is maintained at correct level and flow for machine 4.9 Viscosities are adjusted according to job specifications 4.10 Air volume and drier temperatures curing units are selected to suit inks, substrate, solvents and, according to job specifications 4.11 Air volume is adjusted between colours to maximise drying and minimise air overspill
5. Set up in-line units for basic process/es	5.1 Minor in-line printing/converting/binding units are set up for basic process/es and adjusted according to machine requirements and job specifications 5.2 Assistance is given in set-up of major in-line printing/converting/binding units
6. Conduct proof run	6.1 Material to be used for proof is organised correctly 6.2 Press is set up and operated according to WHS guidelines 6.3 Print impressions are set to minimum kiss impression 6.4 Web tensions are correctly set at unwind, between stations and rewind 6.5 Drying is checked as sufficient to key ink to the substrate 6.6 Viscosities are adjusted to obtain correct colour at proof speed and checked against colour matching system 6.7 Substrate is checked against job specifications
7. Organise proof inspection and/or testing	7.1 Proof is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 7.2 Production does not commence without client approval or authority where appropriate
8. Readjust settings to production speed	8.1 Production speed print results are interpreted and appropriate adjustments are made to press, ink and substrate settings 8.2 Adjustments are made according to product specifications and press performance

ELEMENT	PERFORMANCE CRITERIA
	8.3 Web is spliced at production speed and further samples are obtained for quality inspections at appropriate intervals
	8.4 Press settings are documented and samples are retained

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.4, 2.4, 2.5, 3.1, 3.3, 3.4, 3.6, 4.9, 4.10, 5.1, 6.7, 8.1, 8.2	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications
Writing	3.5, 3.6, 7.2, 8.4	Completes records accurately and according to workplace requirements
Oral Communication	7.2	Participates effectively in spoken interactions using appropriate vocabulary, and employing questioning and listening techniques to gain approvals
Numeracy	3.4, 8.1	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	6.2, 7.1, 7.2	- Complies with legislative requirements and follows organisational policies and procedures relevant to own role - Recognises boundaries of own role responsibilities
Interact with others	5.2, 7.2	- Collaborates with others to complete tasks according to requirements - Follows accepted communication practices and protocols when seeking approval
Get the work done	1.1-1.4, 2.1-2.9, 3.1, 3.2, 3.4, 4.1-4.11, 5.1, 5.2, 6.1-6.7, 7.1, 8.1-8.4	- Takes responsibility for planning and organising own workload using analytical processes to decide on a course of action, and assembles resources required - Implements actions as per instructions, making adjustments if necessary - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Reads data from electronic monitoring and control

		systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN413 Set up for complex flexographic printing	ICPPR413C Set up for complex flexographic printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN413 Set up for complex flexographic printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up flexographic printing machines for non-routine print jobs, conduct a proof run and adjust settings to ensure production speeds are attained
- demonstrate use of computerised control, monitoring and data entry systems if available and appropriate
- set up a flexographic printing machine for a complex job on TWO occasions (if possible using different substrates and if possible including at least two in-line processes) according to manufacturer's and job specifications, and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe production problems that could be created by not reading or understanding the job specifications
- list work health and safety (WHS) factors to consider when mounting and proofing flexographic plates
- describe the most common cause of photopolymer plates crazing on the image side
- explain the importance of printing plate resiliency
- list main advantages of using thin photopolymer plates in process printing
- outline faults that may be detected on new plates
- identify types of solvents used on photopolymer plates
- describe benefits of optical mounting
- explain the purpose of binding plates after mounting
- outline possible print faults that could be eliminated by using a cushion mount
- list WHS factors to consider when installing printing cylinders or sleeves

- describe precautions to ensure the plates and cylinders or sleeves are not damaged during installation
- explain what to check to ensure plates and cylinders or sleeves have been installed correctly
- list WHS precautions to be observed when webbing up the machine
- explain how to determine position of the reel
- demonstrate how the substrate is pulled into the machine
- outline consequences of insufficient unwind tension
- describe consequences of excessive unwind tens
- outline the function of the 'Dancer' roller on a web machine
- explain the function of the PIV unit
- demonstrate knowledge of how to make adjustments to the PIV
- describe the function of the lay-on roller
- outline effects of excessive lay-on roller pressure
- describe what can happen if the web is not spliced correctly
- explain how the particular web viewing device works
- list WHS precautions for setting up the delivery
- explain how the web is controlled in the rewind unit
- describe the result of incorrect rewind tension
- outline remedial steps if there is a possibility of ink marking in the rewind
- explain the function the air blast plays in the delivery of sheets
- list WHS precautions for preparing inks and additives
- identify details to check an ink's suitability for the printing process
- outline special end-use requirements that may be necessary
- describe the main functions of a pigmented extender used in flexographic printing
- explain the purpose of adding plasticisers to flexographic inks
- list additives used in flexographic inks
- outline the range, in seconds, for Zahn cup measurements
- describe the effect foaming has in a Zahn cup when measuring ink viscosity
- identify recommended pH range when printing with aqueous inks
- list precautions to observe to minimise waste when preparing ink
- describe how to determine shelf life of most inks
- outline conditions relevant to storing inks and additives
- list conventions for labelling mixed ink
- list WHS factors to consider when setting up the machine
- identify advantages of centring all machine controls
- describe checks to be made on cylinders and gears
- outline checks to do prior to cylinder or sleeve installation
- identify the angle chamber blades should be set at
- outline the main advantage of gauging up and dry register prior to printing a job
- describe the cell count of the anilox roller used when printing solids
- explain why water treatment additives should be used in a central impression drum and chill roller coolant system

- list advantages of laser engraved ceramic anilox rollers
- demonstrate knowledge of the anilox roller and what it measures
- list possible reasons for anilox wear
- describe the type of job printed using a hexagonal cell configuration
- identify the recommended web temperature when printing polypropylene film
- explain the method of drying used when printing on polythene by the flexographic process
- list factors affecting drying rate of liquid inks
- list factors affecting drying of aqueous inks
- identify the operating range of UV lamps
- list WHS precautions to be observed when slitting on the machine
- explain how a cold seal is formed
- outline reasons for a printed product to be punched
- describe what to consider when setting hole punching in relation to repeat length
- outline consequences of excessive pressure on the slitters
- describe why is it necessary to graduate drying speeds of each progressive colour, so first-down colours dry faster the subsequent colours
- explain why, in flexographic printing, that as press speed increases so does colour strength
- list causes of a decrease in web tension
- outline consequences of increasing rewind tension after the roll has been partially rewound
- identify the major cause of a telescopic roll
- describe print characteristics related to excessive printing pressure
- list causes of picking when printing multicoloured work
- identify print faults from using an over-reduced ink
- outline problems that can cause lateral streaks in uneven printing
- describe causes of moire patterns when printing by the flexographic process
- outline consequences of air being trapped under mounted plates
- name the instrument used to identify retained solvent trapped in the print
- explain the purpose of taking Dyne readings
- explain the purpose of the crinkle test when testing an ink
- outline consequences if an excessive final drying temperature was used when printing polypropylene film
- identify the ink property that can be adjusted to reduce dot gain
- demonstrate understanding of correctly checking ink viscosity while using ink pumps
- identify problems resulting from excessive use of slow solvents
- explain why laminating inks, once printed, appear dull and become easy to scratch
- outline the result of excessive print area tension
- list some of the problems the printer may associate with cold seals
- locate machine manuals, safety and other documentation relevant to this task, and outline information included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment and materials, including a narrow flexographic press.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN414 Produce specialised flexographic printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce specialised flexographic printing that needs a certain amount of problem-solving and experimentation with the substrate and press settings.

It applies to skilled individuals working as print machinists in the printing and graphic arts industry who prepare material, set up, monitor, operate and clean equipment and machinery, problem-solve, analyse and evaluate information from a variety of sources. They may also provide leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain specialised flexographic printing process	1.1 Flexographic plate and plate cylinder or sleeve condition is monitored, evaluated and adjusted to ensure quality of printed product meets the approved proof standard 1.2 Flexographic impression roller condition is monitored and evaluated to ensure the quality of printed product meets the

ELEMENT	PERFORMANCE CRITERIA
	approved proof standard 1.3 Flexographic inking system and doctor blade condition is monitored, evaluated and adjusted to ensure quality of specialised printed product meets the approved proof standard 1.4 Drying systems are monitored, evaluated and adjusted to ensure quality of the specialised printed product meets the approved proof standard
2. Maintain specialised production process	2.1 Production process is maintained in association with fellow workers and according to enterprise procedures and planned daily schedule 2.2 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 2.3 Manual and/or automatic control is used according to job specifications 2.4 Performance is monitored, adjusted and verified using the process control system according to enterprise procedures 2.5 Ink performance, colour, register and position of print are monitored, evaluated and adjusted throughout production run
3. Tune and adjust machinery	3.1 Idiosyncrasies of machines are reviewed and adjustments or tuning undertaken to compensate, or exploit the idiosyncrasy, within manufacturer's specifications 3.2 Options are assessed to determine most effective/efficient method of production, ensuring highest quality and yield from machinery 3.3 Test run confirms correct options and settings or the need for further adjustment or tuning to meet quality standards 3.4 Options and recommendations are documented for future reference according to enterprise procedures 3.5 Instruction on new practices is provided to machine operator or finisher, if required
4. Troubleshoot machinery and material problems	4.1 Corrective or preventive action is recommended and implemented where appropriate 4.2 Changes are communicated to relevant personnel in a logical and easily understood manner 4.3 Changes are monitored to confirm improvement to production efficiency 4.4 Ongoing problems are reported according to enterprise

ELEMENT	PERFORMANCE CRITERIA
	procedures
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Reels and cores are removed from press 5.4 Unused ink is drained back into containers and correctly labelled and stored according to manufacturer's/supplier's specifications and enterprise procedures 5.5 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.6 Product is removed from operating area

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.2, 2.3, 3.1, 5.1, 5.4	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications
Writing	3.4, 3.5, 4.1, 4.4, 5.4	Completes records, forms and other documents accurately and according to workplace requirements
Oral Communication	2.1, 3.5, 4.1, 4.2, 4.4, 5.2	Participates effectively in discussions using appropriate vocabulary, questioning and listening skills
Navigate the world of work	2.1, 2.2, 3.4, 4.4, 5.1, 5.2, 5.4, 5.5	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	2.1, 3.5, 4.1, 4.2, 4.4, 5.2	- Collaborates and cooperates with others to achieve joint outcomes - Contributes to workgroup discussions using accepted conventions - Selects and uses appropriate communication practices when reporting issues

Get the work done	1.1-1.4, 2.1-2.5, 3.1, 3.4, 4.1-4.4, 5.1-5.6	• Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources • Makes rapid decisions when required, drawing on in-depth understanding of a situation and experience of decision-making • Responds to predictable problems and implements standard or logical solutions related to role in the immediate work environment • Reads data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN414 Produce specialised flexographic printed product	ICPPR414C Produce specialised flexographic printed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN414 Produce specialised flexographic printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely monitor production output and make necessary adjustments to maintain print quality on a flexographic machine while producing a complex print on TWO occasions (if possible using different substrates and, if possible, including at least two in-line processes) according to job specifications, enterprise procedures and work health and safety (WHS) guidelines.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify causes of reel wander and the print fault that results from the reel being run out of centre
- identify causes of web breaking at the unwind unit, and possible faults in the unwind section that cause a web break
- outline the difference between a 'flying paster' and 'zero speed' type reel-stand
- outline WHS risks associated with rewinding and sheeting, and identify the safety feature in the delivery system for when the web jams up
- identify causes of sheet cut-off wander
- outline the effect of poorly adjusted nip rollers when rewinding and sheeting, and what happens if the plate lifts on the leading edge during a print run
- describe the effect on printed product of a build-up of ink on the impression cylinder, and the cause of ink foaming in the ink tray
- identify the effect of too much reducer in the ink
- name the action that reduces doctor blade wear
- describe why all solvents need to be removed from the final ink film

- identify link between driers and set off and marking and the causes of UV ink drying
- describe faults that cause substrate distortion
- outline the effect in the chillers if the drying temperature is too low, and the effect of incorrect drying temperature on the finished product
- describe the effect of eating or drinking near the machine when using UV inks
- describe the need to frequently examine in-line components of the job
- outline consistency checks for the punching unit
- describe the result of excessive pressure on the slitters
- outline safety features within the organisation that aid in maintaining effective production
- outline the legal responsibility for removal of machine guards and/or disconnection of micro switches
- describe the effect of inadequate communication within the work team on a flexographic printing machine
- describe ramifications if machine guards are removed and/or micro switches are disconnected on a machine
- outline other measurement, besides optimum solid ink density, to assess print quality
- describe the most accurate method of checking register during a production run
- outline the need to take immediate action when production problems are anticipated, and action taken to eliminate further processing of unacceptable printed product
- outline the result to the substrate if relative humidity is increased in the press room, and how to care for a newly delivered substrate to the press room
- describe the process for waste sorting and the advantage of keeping reusable waste
- list industry standards to enhance effective communication with clients, and procedures clients should follow to approve a printed product
- identify times when it is necessary to call service personnel to correct a machine problem
- outline enterprise procedures in place to report any machine operating problems, and what happens if correct shutdown procedures are not followed with fellow workers
- describe advantages of proper labelling and storage of excess inks and materials
- describe the process for clear labelling of printed product prior to removal from the press room
- outline operations required for printed reels after they are removed from the printing machine, and how to store printed jobs after they are removed from the printing machine
- outline use of completed records in the final analysis of the job, and benefits of comprehensive records when considering production of future jobs
- identify machine manuals, safety and other documentation relevant to this task, where are they kept and information included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment and materials, including a reel-fed flexographic press.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN421 Set up for complex gravure printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up non-routine gravure printing machines for non-routine print jobs. It includes the ability to conduct a proof run and adjust settings to ensure production speeds are attained.

It applies to individuals working as print machinists in the printing and graphic arts industry. They prepare material, set up, monitor and operate equipment and machinery, apply solutions to a defined range of problems associated with the print medium and analyse and evaluate information from a variety of sources. They may also provide leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm non-routine job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked

ELEMENT	PERFORMANCE CRITERIA
2. Set up reels	2.1 Unwind and rewind reels are set up and adjusted according to job specifications 2.2 Webbing procedures are carried out according to non-routine job specifications 2.3 Web-control system is set up and adjusted according to job specifications 2.4 Reels are spliced/joined according to job specifications 2.5 Printed web viewing devices are set up and adjusted according to job specifications 2.6 Folder and sheeter are set up and adjusted according to job specifications 2.7 Set off / marking prevention devices are set up and adjusted according to job specifications
3. Select and prepare inks and additives	3.1 Inks, dyes or additives are selected according to job specifications and end-user requirements 3.2 Quality and suitability of inks, dyes or additives are checked and appropriate action is taken 3.3 Inks, dyes and additives are prepared according to WHS requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 3.4 Correct colour and weight/volume of ink are mixed and prepared to match requirements of the printing process and job specifications 3.5 Formulation of ink, colour match and approved colour are appropriately recorded 3.6 Inks, dyes and additives are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions to prevent damage and hazards to personnel, and to prolong shelf life
4. Set up machine for complex gravure printing	4.1 Gravure cylinders are selected, installed, set up and adjusted according to job specifications 4.2 Impression roller is set up and adjusted according to job specifications 4.3 Inking system / doctor blade is set up and adjusted according to the gravure process and job specifications 4.4 Drying system is set up and adjusted according to job specifications
5. Conduct proof run	5.1 Material to be used for proof is organised correctly

ELEMENT	PERFORMANCE CRITERIA
	5.2 Machine is operated according to manufacturer's and enterprise procedures to produce a specified proof 5.3 Machine is operated according to manufacturer's and enterprise procedures to produce a specified proof 5.4 Production does not commence without client approval or authority where appropriate 5.5 Results are interpreted and adjustments are carried out according to product and machine specifications to determine adjustment requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1-2.7, 3.1, 3.3, 3.4, 3.6, 4.1-4.4, 5.5	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications
Writing	3.5, 3.6, 5.4	Completes records and documents accurately and according to workplace requirements
Oral Communication	5.4	Participates effectively in spoken interactions using appropriate vocabulary, questioning and listening techniques to gain approvals
Navigate the world of work	3.3, 3.5, 3.6, 5.2-5.4	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	5.4	Follows accepted communication practices and protocols when seeking approval to commence production
Get the work done	1.1-1.3, 2.1-2.7, 3.1-3.4, 3.6, 4.1-4.4, 5.1-5.3, 5.5	- Takes responsibility for planning and organising own workload using analytical processes to decide on a course of action, and assembles required resources - Implements actions as per instructions, making adjustments if necessary - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment - Reads data from electronic monitoring and control

		systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN421 Set up for complex gravure printing	ICPPR421C Set up for complex gravure printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN421 Set up for complex gravure printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up a gravure printing machine for a complex job on TWO occasions (if possible using different substrates and, if possible, including at least two in-line processes) according to manufacturer's specifications and enterprise procedures
- conduct proof run and adjust settings to ensure production speeds are attained
- demonstrate use of control, monitoring and data entry systems.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain why it is necessary to ensure job specifications are read and properly understood
- identify production problems that could eventuate if job specifications are not read and properly understood
- identify who production problems should be discussed with
- list work health and safety (WHS) precautions for installing printing cylinders on the machine
- demonstrate knowledge to determine the optimum print sequence
- identify the visual aid on the cylinder that identifies colour of ink to be used
- outline precautions to ensure the cylinders are not damaged during installation
- list WHS precautions for webbing up the machine
- explain how to determine position of the reel
- explain what can happen if brake tension is not set correctly
- outline the function of the 'Dancer' roller on a web machine
- describe consequences if the web is not spliced correctly
- demonstrate knowledge of how the particular web viewing device works

- explain the principle of ESA roller operation on the gravure printing machine
- name the type of substrate used on the ESA roller
- list WHS precautions for setting up the delivery
- explain how the web is controlled in the rewind unit
- describe the result of incorrect rewind tension
- outline remedial steps if there is a possibility of the ink marking in the rewind
- describe problems that could be attributed to a blunt knife when sheeting
- explain the function air blast plays in the delivery of sheets
- list WHS precautions for preparing inks and additives
- identify details to check an ink's suitability for the printing process
- outline special end-use requirements that may be necessary
- explain why additives are used in gravure inks
- outline the range, in seconds, for Zahn cup measurements
- describe the effect foaming has in a Zahn cup when measuring ink viscosity
- demonstrate knowledge of why pigmented ink should be brought to operating temperature before correcting viscosity
- identify essential checks to be made
- list advantages of using automatic viscosity controllers
- outline precautions to minimise waste when preparing ink
- describe how to determine shelf life of most inks
- outline conditions relevant to storage of inks and additives
- list conventions to adhere to when labelling mixed inks
- identify advantages of using automatic viscosity controllers
- describe precautions to minimise waste when preparing ink
- describe how to determine shelf life of most inks
- outline conditions relevant to storage of inks and additives
- list conventions to adhere to when labelling mixed inks
- list WHS factors for setting up the machine
- describe the function of chill rollers on a machine
- outline main advantages of gauging up and dry register prior to printing a job
- identify the consequence of excess printing pressure
- explain how pressure applied to the doctor blade is determined
- describe print faults that can be caused by excessive overspill of air from the inter-colour drier
- identify the recommended air ratio for efficient inter-colour drying
- outline advantages of using high-velocity air in the drying system
- list WHS precautions for slitting on the machine
- identify the pre-heat web temperature required for lamination
- outline reasons for a printed product to be punched
- describe what should be considered when setting hole punching in relation to repeat length
- explain the purpose of the dwell when cutting and creasing in-line
- demonstrate knowledge of how to control the ratio of print to in-line speed

- describe the consequence of excessive pressure on the slitters
- outline what causes doctor blade wear on a gravure printing unit
- explain how to reduce doctor blade wear
- demonstrate how to determine optimum make ready speed for the job
- explain how the steps involved in the make ready are communicated to other team members
- describe why it is necessary to grade drying speeds of each progressive colour, so first-down colours dry faster the subsequent colours
- list causes of a decrease in web tension
- outline consequences of increasing rewind tension after the roll has been partially rewound
- identify the major cause of a telescopic roll
- explain how to test metallised film to find out which is the correct side to print on
- describe how metallised surface is measured for coating thickness
- outline the effect of annealing on aluminium foil
- explain purpose of using thermal imaging face stocks
- describe how substrates are metallised
- identify client requirements for bar codes
- describe print characteristics related to excessive printing pressure
- explain what causes picking when printing multicoloured work
- outline print faults that can result from using an over-reduced ink
- describe causes of moire patterns when printing by the gravure process
- name the instrument used to identify retained solvent trapped in the print
- explain the purpose of taking Dyne readings
- explain the purpose of the crinkle test when testing an ink
- describe print faults resulting from a worn doctor blade
- demonstrate knowledge of correct checks for ink viscosity while using ink pumps
- identify problems that result from excessive use of slow solvents
- explain why laminating inks, once printed, appear dull and easy to scratch
- outline the result of excessive print area tension
- list some of the problems the printer may associate with cold seals
- identify who has responsibility for the final say regarding job approval
- locate machine manuals, safety and other documentation relevant to this task, and outline the information included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment and materials, including a gravure printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN422 Produce specialised gravure printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to operate a gravure press, ensuring an efficient production flow for specialised jobs while maintaining product quality standards. Any production problems are anticipated and rectified with minimum downtime. The machine is correctly shut down and cleaned according to work health and safety (WHS) guidelines.

It applies to individuals working as print machinists in the printing and graphic arts industry. They prepare material, set up, monitor and operate equipment and machinery, apply solutions to a defined range of problems associated with the print medium, and analyse and evaluate information from a variety of sources. They may also provide leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain specialised gravure printing process	1.1 Gravure cylinder condition is monitored, evaluated and adjusted to ensure quality of printed product meets the sample sheet standard 1.2 Gravure impression roller condition is monitored, evaluated and maintained to ensure quality of the specialised printed product

ELEMENT	PERFORMANCE CRITERIA
	meets the sample sheet standard 1.3 Gravure inking system and doctor blade are monitored, evaluated and adjusted to ensure quality of specialised printed product meets the sample sheet standard 1.4 Drying systems are monitored, evaluated and adjusted to ensure quality of specialised printed product meets the approved proof standard 1.5 In-line printing/converting/binding/finishing processes are monitored, evaluated and adjusted to ensure quality of specialised product meets the approved proof standard
2. Maintain specialised production process	2.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 2.2 Production is maintained according to WHS requirements, manufacturer's specifications and enterprise procedures 2.3 Manual and/or automatic control is used according to job specifications 2.4 Performance is monitored and verified using the process control system according to enterprise procedures 2.5 Ink performance, colour, register and position of print are monitored, evaluated and adjusted throughout production run 2.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 2.7 Process adjustments to eliminate problems are reported according to enterprise procedures 2.8 Waste is sorted according to enterprise procedures
3. Tune and adjust machinery	3.1 Idiosyncrasies of machines are reviewed and adjustments or tuning undertaken to compensate, or exploit the idiosyncrasy within manufacturer's specifications 3.2 Test run confirms correct options and settings or need for further adjustment or tuning to meet quality standards 3.3 Options and recommendations are documented for future reference according to enterprise procedures 3.4 Instruction on new practices is provided to machine operator or finisher, if required

ELEMENT	PERFORMANCE CRITERIA
4. Troubleshoot machinery and material problems	4.1 Corrective or preventive action is recommended and implemented where appropriate 4.2 Changes are communicated to relevant personnel in a logical and easily understood manner 4.3 Changes are monitored to confirm improvement to production efficiency 4.4 Ongoing problems are reported according to enterprise procedures
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Unused ink is correctly labelled and stored according to manufacturer's/supplier's specifications and enterprise procedures 5.4 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.5 All product is removed from operating area 5.6 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.2, 2.3, 3.1, 3.2, 5.1, 5.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	2.7, 3.3, 4.4, 5.3, 5.6,	Completes records, forms and other documents accurately and according to workplace requirements
Oral Communication	2.1, 2.7, 3.4, 4.1, 4.2, 4.4, 5.2, 5.6,	Participates effectively in discussions using appropriate vocabulary, and questioning and listening skills

Navigate the world of work	2.1, 2.2, 2.4, 2.5, 2.7, 2.8, 3.3, 4.4, 5.1-5.4, 5.6,	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	2.1, 2.7, 3.4, 4.1, 4.4, 5.2, 5.6,	- Collaborates and cooperates with others to achieve joint outcomes - Contributes to work group discussions using accepted conventions
Get the work done	1.1-1.5, 2.-2.8, 3.1, 3.2, 5.1-	- Determines priorities and sequences steps involved in clearly defined, familiar tasks; and identifies and assembles required resources - Makes rapid decisions when required, drawing on in-depth understanding of a situation and decision-making experience - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment - Reads data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN422 Produce specialised gravure printed product	ICPPR422C Produce specialised gravure printed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN422 Produce specialised gravure printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- operate a gravure press ensuring production flow that maintains product quality standards and minimises downtime from production problems
- shut down and clean a gravure press according to work health and safety (WHS) guidelines
- monitor production output and make necessary adjustments to maintain print quality on a gravure machine while producing a complex print on TWO occasions (if possible using different substrates and, if possible, including at least two in-line processes) according to job specifications, enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe what can cause reel to wander
- outline what can cause the web to break at the unwind unit
- explain the difference between a 'flying paster' and 'zero speed' type reel-stand
- outline the print fault that results from the reel being run out of centre
- list possible faults in the unwind section that can cause a web break
- identify WHS risks associated with rewinding and sheeting
- identify the safety feature in the delivery system for when the web jams up
- explain why the sheet cut-off might wander
- describe the effect of poorly adjusted nip rollers when rewinding and sheeting
- explain the effect of a build-up of ink on the impression cylinder on printed product
- list causes of ink foaming in the ink tray

- outline the effect of too much reducer in ink
- describe what action can reduce wear of the doctor blade
- explain why all solvents need to be removed from the final ink film
- describe link between driers and set off and marking
- explain the cause of substrate distortion
- describe the effect in the chillers, if the drying temperature was too low
- identify the effect of incorrect drying temperature on the finished product
- outline the effect of inadequate communication within the work team on a gravure printing machine
- list safety features within the organisation that aid in maintaining effective production
- describe ramifications if machine guards are removed and/or micro switches are disconnected on a machine
- identify who is legally responsible for the removal of machine guards and/or disconnection of micro switches
- demonstrate knowledge of the most accurate method of checking register during a production run
- explain why it is necessary to take immediate action when production problems are anticipated
- describe what to do to eliminate further processing of unacceptable printed product
- explain what happens to the substrate if relative humidity is increased in the press room
- list procedures to care for a newly delivered substrate to the press room
- demonstrate knowledge of how to correctly sort waste
- outline advantages of keeping reusable waste
- identify industry standards to enhance effective communication with clients
- list necessary procedures clients should follow to approve a printed product
- explain when to call service personnel to correct a machine problem
- outline enterprise procedures to report any machine operating problems
- describe consequences if correct shutdown procedures are not followed
- explain why it is necessary for correct shutdown procedures to be conducted with fellow workers
- list advantages of proper labelling and storage of excess inks and materials
- explain why printed product should be clearly labelled prior to removal from the press room
- outline any additional operations required for printed reels after they are removed from the printing machine
- describe how the printed job should be stored after it is removed from the printing machine
- explain how completed records are used in final analysis of the job
- describe benefits of comprehensive records when considering production of future jobs
- locate machine manuals, safety and other documentation relevant to this task and outline information included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment and materials including a gravure printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN431 Set up for complex lithographic printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up options, and then set up either wide or narrow reel or sheet-fed lithographic printing machines for non-routine print jobs. It includes the ability to conduct a proof run and adjust settings to ensure production speeds are attained in minimum time with minimum wastage.

It applies to individuals working as print machinists in the printing and graphic arts industry. They prepare material, set up, monitor and operate equipment and machinery, apply solutions to a defined range of problems associated with the print medium, and analyse and evaluate information from a variety of sources. They may also provide leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm complex job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Non-routine set up is planned and carried out correctly in minimum time with minimum wastage

ELEMENT	PERFORMANCE CRITERIA
	1.3 Availability of all job related components is checked
2. Set up delivery systems	2.1 Delivery systems are set up and adjusted according to job specifications 2.2 Substrate is added to and removed from process according to job specifications
3. Select and prepare inks and additives	3.1 Colour sequence for job is considered and confirmed 3.2 Inks, dyes or additives are selected according to non-routine job specifications and end-user requirements 3.3 Quality and suitability of inks, dyes or additives are checked and appropriate action is taken 3.4 Inks, dyes and additives are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions, with suitable precautions to minimise waste 3.5 Correct colour and weight/volume of ink is mixed and prepared to match requirements of the job specification and the non-routine printing process 3.6 Formulation of ink, colour match and approved colour are appropriately recorded 3.7 Inks, dyes and additives are appropriately labelled, handled and stored according to manufacturer's/ supplier's instructions to prevent damage and hazards to personnel and to prolong shelf life
4. Set up machine for complex lithographic printing	4.1 Plate cylinder is set up and adjusted according to job specifications 4.2 Plates are correctly mounted according to machine specification and in a safe manner 4.3 Blanket and blanket cylinder are set up and adjusted according to job specifications 4.4 Impression cylinder is set up and adjusted according to job specifications 4.5 Inking system is set up and adjusted according to the lithographic process and job specifications 4.6 Dampening system is set up and adjusted according to job specifications 4.7 Drying system is set up and adjusted according to job specifications
5. Conduct proof run	5.1 Material to be used for proof is organised correctly

ELEMENT	PERFORMANCE CRITERIA
	5.2 Machine is operated according to manufacturer's and enterprise procedures to produce a specified proof 5.3 Production does not commence without client approval or authority where appropriate 5.4 Results are interpreted and adjustments are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.2, 3.4, 3.7, 4.1-4.8, 5.4	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications
Writing	5.7, 5.3	Completes forms and labels accurately and according to workplace requirements
Oral Communication	5.3	Participates effectively in spoken interactions using appropriate vocabulary, and employs questioning and listening techniques to gain approvals
Navigate the world of work	3.4, 3.6, 3.7, 4.3, 5.2, 5.3,	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	5.3	Follows accepted communication practices and protocols when seeking approval
Get the work done	1.1-1.3, 2.1, 2.2, 3.1, 3.2-3.5, 3.7, 4.1-4.8, 5.1, 5.2, 5.4	- With assistance, determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment - Reads data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• reel OR • sheet
Setting and adjusting MUST include EITHER:	• set up options for unwind and rewind reels • webbing procedures and web control system • splicing/joining reels • printed web viewing devices • folder and sheeter • set off / marking prevention devices OR • feeder and delivery sections • sheet pick-up, transportation and control and transfer systems • set off / marking prevention devices

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN431 Set up for complex lithographic printing	ICPPR431C Set up for complex lithographic printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN431 Set up for complex lithographic printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up a lithographic printing machine for a complex job on TWO occasions (if possible using different substrates and sheet sizes if sheet-fed and, if possible, including at least two in-line processes) according to job and manufacturer's specifications, and enterprise procedures
- set up either wide or narrow reel or sheet-fed lithographic printing machines for non-routine print jobs
- conduct proof run and adjust settings to ensure production speeds are attained in minimum time with minimum wastage

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain why it is necessary to ensure the job specifications are read and properly understood
- describe production problems that can eventuate from not reading and understanding the job specifications
- identify who to discuss any production problems with
- describe problems that can result from the plate cylinder not being cleaned prior to plate fitting
- explain what can happen if the plate is over-tensioned during fitting
- explain faults that can result from a plate being under-tensioned
- describe why accurate plate bending is necessary on a web-fed machine
- outline considerations for deciding the colour sequence
- describe the visual aid on the plate that identifies colour of ink to be used

For reel systems only

- list work health and safety (WHS) precautions for webbing up the machine
- explain how to determine position of the reel
- describe what can happen if the brake tension is not set correctly
- outline the function of the 'Dancer' roller on a web machine
- demonstrate knowledge of how to determine the position of bustle wheels
- explain what can happen if the web is not spliced correctly
- demonstrate knowledge of how the particular web viewing device works
- explain how to control the web in the rewind unit
- describe the function of a slitter on a web machine
- list possible causes of the web to jam up in the folder
- explain the need to disengage folder if sheeting
- describe problems that can be attributed to a blunt knife when sheeting
- name a safety feature in the delivery system for when the web jams up
- describe which fold is always made with the grain of the web
- identify the type of folder that folds the web in half in the direction of the web grain
- list remedial steps if there is a possibility of the ink marking in the folder
- outline main reasons for having a silicone applicator on a web machine
- list main reasons for blistering on a heat-set machine
- identify substances that evaporate after ink is placed in the oven
- describe the function of chill rollers on a web machine

For sheet systems only

- list WHS factors to consider when setting up sheet transportation and delivery systems
- explain what can cause more than one sheet to be picked up in the feeder
- outline the need for accurate feeder set up
- identify what determines position of the sheet prior to being transferred to the printing unit
- explain how to decide which front lays to use
- describe the type of substrate that requires additional front lays to be engaged
- explain the need for additional front lays when printing this type of substrate
- list WHS precautions for setting up the delivery
- list WHS precautions for removing sheets from the delivery
- explain the cause of sheets being delivered incorrectly
- describe necessary adjustments if changing from lightweight to heavyweight stocks
- explain what determines sheet release into the delivery
- outline problems from excessive use of anti-set off spray powder
- list possible causes of printed sheets to set off in the delivery
- explain how to reduce possibility of set off in the delivery
- identify faults that may be created by excess vacuum on the slow-down wheels
- outline the procedure to lengthen print length on this type of press

- outline the procedure to shorten print length on this type of press
- list WHS concerns for preparation of inks and additives
- identify details to check an ink's suitability for the printing process
- outline special end-use requirements that may be necessary
- explain why it may be necessary to mix an additive into the ink
- explain how a spectrophotometer can be used to assess colour of an ink
- describe the formula for calculating correct quantity of lithographic ink
- name a print fault likely if excessive driers are mixed into ink
- describe precautions to minimise waste when preparing ink
- describe how to determine shelf life of most inks
- outline conditions relevant to storage of inks and additives
- list conventions to follow when labelling mixed inks
- list WHS factors to consider when setting up the machine
- describe checks to be made on the plate prior to fitting
- outline how much plate packing is required
- explain normal printing pressure required between plate and blanket
- explain how to determine correct printing pressure between blanket and stock
- outline ideal blanket surface condition
- explain how to achieve correct blanket tension when fitting a new blanket
- identify print faults likely if the impression cylinder is not maintained
- describe the order eccentric or concentric roller adjustments should be made in
- list the contact stripe width required between two rollers when setting the rollers
- demonstrate how to determine ink duct setting
- explain the ideal ink duct sweep setting
- describe recommended degrees of shore hardness for bare back and conventional dampeners
- describe the best conductivity of fountain solution
- explain why it is necessary to constantly check conductivity of fountain solution
- demonstrate knowledge of how to change the amount of fountain solution across the plate surface
- explain why it may be necessary to adjust fountain solution laterally
- explain the effect of engaging the perfecting unit on the run
- list WHS precautions for slitting on the machine
- describe operations performed with in-line units
- demonstrate knowledge of machine position used to engage in-line processing units
- identify precautions for setting up in-line processing units
- list reasons for a printed product to be punched
- outline what to consider when setting hole punching in relation to repeat length
- describe the result of excessive pressure on the slitters
- describe the operation of the true inch function fitted to some machines
- describe problems that may cause the machine to keep stopping
- list necessary checks prior to engaging the impression

- list checks performed when running the machine
- explain the effect the position of certain guards have on machine operation
- outline how steps involved in operating the machine are communicated to other team members
- name various aids available for testing the machine proof
- identify where testing should take place
- explain the function of a polarisation filter in a densitometer
- describe the ideal conditions for inspecting the proof
- outline the need to use visual aids on the printed sheets
- identify the acceptable wet trap value range for lithographic inks
- explain what indicates optimum solid ink density, in the absence of a proof
- describe the result of low solid ink density and excessive dot gain
- list methods to check and adjust ink colour and consistency
- explain adjustments that may cause mis-register
- explain adjustments required to position the image laterally
- list adjustments made to position the image circumferentially
- list adjustments made to position the image diagonally
- describe the effect of changing colour sequence on the wet trap value
- explain the difference between mechanical and optical dot gain
- describe factors that can cause excessive mechanical dot gain
- identify who has responsibility for the final approval of the job
- locate machine manuals, safety and other documentation relevant to this task and outline the information included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment and materials, including a lithographic printing machine with in-line units

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN432 Produce specialised lithographic printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to operate a lithographic press, ensuring an efficient, specialised production flow that maintains product quality standards. Any production problems are anticipated and rectified with minimum downtime. The machine is correctly shut down and cleaned according to work health and safety (WHS) guidelines.

It applies to individuals working as print machinists in the printing and graphic arts industry. They prepare material, set up, monitor and operate equipment and machinery, apply solutions to a defined range of problems associated with the print medium, and analyse and evaluate information from a variety of sources. They may also provide leadership and guidance to others, with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain specialised lithographic printing process	1.1 Lithographic plate and plate cylinder conditions are monitored, evaluated and adjusted to ensure quality of specialised printed product meets the sample sheet standard 1.2 Lithographic blanket and blanket cylinder conditions are monitored, evaluated and adjusted to ensure quality of specialised

ELEMENT	PERFORMANCE CRITERIA
	printed product meets the sample sheet standard 1.3 Lithographic impression cylinder condition is monitored, evaluated and adjusted to ensure quality of specialised printed product meets the sample sheet standard 1.4 Lithographic inking system is checked and maintained to ensure quality of specialised printed product meets the sample sheet standard 1.5 Lithographic dampening system condition is monitored, evaluated and adjusted to ensure quality of specialised printed product meets the sample sheet standard 1.6 Set off / marking prevention and drying system is monitored, evaluated and adjusted to ensure quality of specialised printed product meets the sample sheet standard 1.7 Drying systems are monitored, evaluated and adjusted to ensure quality of specialised printed product meets the approved proof standard
2. Maintain specialised production process	2.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 2.2 Production is maintained according to WHS requirements, manufacturer's specifications and enterprise procedures 2.3 Manual and/or automatic control is used according to job specifications 2.4 Performance is monitored, evaluated and verified using the process control system according to enterprise procedures 2.5 Ink performance, colour, register and position of print are monitored, evaluated and adjusted throughout production run 2.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 2.7 Process adjustments to eliminate problems are reported according to enterprise procedures 2.8 Faulty performance of equipment is identified and reported according to enterprise procedures 2.9 Waste is sorted according to enterprise procedures
3. Tune and adjust machinery	3.1 Idiosyncrasies of machines are reviewed and adjustments or tuning undertaken to compensate, or to exploit the idiosyncrasy, within manufacturer's specifications 3.2 Options are assessed to determine most effective/efficient

ELEMENT	PERFORMANCE CRITERIA
	method of production, ensuring highest quality and yield from machinery 3.3 Test run confirms correct options and settings or need for further adjustment or tuning to meet quality standards 3.4 Options and recommendations are documented for future reference according to enterprise procedures 3.5 Instruction on new practices is provided to machine operator or finisher, if required
4. Troubleshoot machinery and material problems	4.1 Corrective or preventive action is recommended and implemented where appropriate 4.2 Changes are communicated to relevant personnel in a logical and easily understood manner 4.3 Changes are monitored to confirm improvement to production efficiency 4.4 Ongoing problems are reported according to enterprise procedures
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Plate cylinder is set up and adjusted according to job specifications 5.3 Unused ink is correctly labelled and stored according to manufacturer's/supplier's specifications and enterprise procedures 5.4 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.5 All product is removed from operating area 5.6 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 5.7 Repair/adjustment is verified prior to resumption of operations

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance	Description

	Criteria	
Reading	2.2, 2.3, 3.1, 5.1-5.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	2.7, 2.8, 3.1, 3.4, 4.4, 5.3, 5.6, 5.7	Completes records, forms and other documents accurately and according to workplace requirements
Oral Communication	2.1, 2.7, 2.8, 4.1, 4.2, 4.4, 5.6, 5.7	Participates effectively in discussions using appropriate vocabulary, questioning and listening skills
Navigate the world of work	2.1, 2.2, 2.4, 2.7-2.9, 3.4, 4.4, 5.1, 5.3, 5.4, 5.6	- Works independently and collectively within broad parameters, with a strong sense of responsibility and ownership of goals, plans, decisions and outcomes, as well as recognising and following explicit and implicit protocols - Complies with WHS, legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	2.1, 2.7, 2.8, 3.5, 4.1, 4.2, 4.4, 5.6, 5.7	- Collaborates and cooperates with others to achieve joint outcomes - Contributes to work group discussions using accepted conventions
Get the work done	1.1-1.7, 2.1-2.6, 2.8, 2.9, 3.1, 3.4, 3.5, 4.1-4.4, 5.1-5.7	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources - Makes rapid decisions when required, drawing on in-depth understanding of a situation and decision-making experience - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment - Reads data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN432 Produce specialised lithographic printed	ICPPR432C Produce specialised lithographic printed	Updated to meet Standards for	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
product	product	Training Packages	

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN432 Produce specialised lithographic printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- operate a lithographic press using an efficient, specialised production flow that maintains product quality standards, including rectifying production problems with minimum downtime, and cleaning and shutting down the machine according to work health and safety (WHS) guidelines
- monitor production output and make necessary adjustments to maintain print quality on a lithographic machine while producing a specialised print on TWO occasions (if possible using different types and sizes of substrates) according to job specifications, enterprise procedures and the performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify WHS concerns when operating the reel transportation system
- explain what can cause the reel to wander
- explain what can cause the web to break at the unwind unit
- describe the difference between a 'lying paster' and 'zero speed' type reel-stand
- list print faults that can result from the reel being run out of centre
- outline possible faults in the unwind section that can cause a web break
- identify WHS concerns of operating the sheet transportation system
- describe the result of worn suckers at the feeder suction head
- describe sheet detection types on this machine
- describe the amount of movement the sheet should have when being registered by the side lay
- explain what causes a miss-register of the sheet at the feeder

- outline visible signs of the sheet being registered in the feeder
- explain how gripper malfunction can affect sheet control and transfer
- describe when sheet transfer mechanisms require adjusting
- outline what can cause the feeder stack to become uneven
- describe the result of the feeder stack being loaded unevenly
- explain how unevenness of the feeder stack can be rectified
- identify WHS risks associated with rewinding and sheeting
- describe a safety feature in the delivery system for when the web jams up
- explain why a sheet cut-off might wander
- outline the effect of poorly adjusted nip rollers when rewinding and sheeting
- describe further operations required for printed reels on removal from the printing machine
- explain how the printed job should be stored after removal from the printing machine
- explain the need to label each printed reel
- outline the effect machine speed has on sheet delivery
- explain the advantage of spraying moving sheets with anti-set off powder in delivery
- identify items in delivery that cause marking of the printed image
- describe remedial steps to eliminate marking of the printed image
- describe the function of a sheet de-curler fitted to the delivery of some machines
- provide a list of faults from incorrectly set grippers in the transfer section of a machine
- describe what can happen if the plate develops a crack at the grip edge during a print run
- outline the effect of a sticky blanket surface
- list print faults from the blanket not being tensioned correctly
- explain the cause of blanket packing creep during printing
- describe the effect of ink build-up on the impression cylinder on the printed product
- explain what can cause ink to lie back in the duct
- explain what can cause ink stripping on the inking rollers
- describe print faults that result from excessive use of fountain solution on the plate
- demonstrate knowledge of the recommended pH range for fountain solutions
- explain what can cause conductivity of the fountain solution to change over an eight-hour shift
- identify problems that can be caused by excessive conductivity of the fountain solutions
- explain risks of eating or drinking near the machine when using UV inks
- describe link between driers and set off and marking
- explain what causes UV ink to dry
- explain what can cause the substrate to blister
- outline the effect in the chillers if the drying temperature is too low
- describe the effect of incorrect drying temperature on the finished product
- describe the effect of inadequate communication within the work team on a lithographic printing machine
- identify safety features within the organisation that aid in maintaining effective production
- outline the ramifications if machine guards are removed and/or micro switches are disconnected on a machine

- identify who is held legally responsible for removal of machine guards and/or disconnection of micro switches
- describe the disadvantage of using a closed looped system for automatic control of the printed product
- list alternative measurement, besides optimum solid ink density, to assess print quality
- explain the most accurate method of checking register during a production run
- explain the need to take immediate action when production problems are anticipated
- outline what to do to eliminate further processing of unacceptable printed product
- explain how a stack of paper is affected if the relative humidity is increased in the press room
- explain the procedure to care for a newly delivered skid of paper to the press room
- explain why waste should be sorted
- list advantages of keeping reusable waste
- list industry standards to enhance effective communication with clients
- describe the necessary procedures clients should follow to approve a printed product
- outline when to call service personnel to correct a machine problem
- describe enterprise procedures in place to report any machine operating problems
- outline the result if correct shutdown procedures are not followed
- explain the need for correct shutdown procedures conducted with fellow workers
- describe the advantages of proper labelling and storage of excess inks and materials
- explain the use of completed records in final analysis of the job
- outline the benefits of comprehensive records when considering production of future jobs
- locate machine manuals, safety and other documentation relevant to this task, and outline included information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- lithographic printing machine with in-line units.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN441 Set up for complex pad printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up complex pad printing machines for multi-coloured or non-routine print jobs. It includes the ability to set up manual pre- and post-treatment processes, conduct a proof run and adjust settings to ensure production speeds are attained.

It applies to individuals working as print machinists in the printing and graphic arts industry. They prepare material, set up, monitor and operate equipment and machinery, apply solutions to a defined range of problems associated with the print medium, and analyse and evaluate information from a variety of sources. They may also provide leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm non-routine job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is planned and carried out correctly in minimum time with minimum wastage

ELEMENT	PERFORMANCE CRITERIA
	1.3 Availability of all job related components is checked
2. Install tampons (printing pads) into machine	2.1 Appropriate tampons are selected according to non-routine job specifications/requirements 2.2 Tampons are secured into machine
3. Set up fixtures onto machine bed or conveyor	3.1 Appropriate fixtures are selected and secured to X-Y table or conveyor jig plates 3.2 Adjustments are made to height of machine bed to suit size of object to be printed 3.3 Adjustments are made to X-Y table of machine bed to suit position of image on object
4. Select and prepare inks and additives	4.1 Inks, and additives are selected according to non-routine job specifications and end-user requirements 4.2 Quality and suitability of inks and additives are checked and appropriate action is taken 4.3 Inks and additives are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 4.4 Correct colour and weight/volume of ink is mixed and prepared to match requirements of the non-routine job specification and the printing process 4.5 Formulation of ink, colour match and approved colour are appropriately recorded 4.6 Inks and additives are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions to prevent damage and hazards to personnel and to prolong shelf life
5. Set up machine for complex pad printing	5.1 Plate holders are set up and adjusted for register according to job specifications 5.2 Appropriate plates and plate holders are selected and plates are secured into plate holders 5.3 Tampons are set up and adjusted according to job specifications 5.4 Spatula and doctor blade or ink cups are set up and adjusted according to printing process and job specifications
6. Set up pre- and post-treatment in-line processes	6.1 In-line loading is set up to suit non-routine object and according to job specifications 6.2 In-line pre-treatment is set up to suit non-routine object and

ELEMENT	PERFORMANCE CRITERIA
	according to job specifications 6.3 In-line drying is set up to suit non-routine object and according to job specifications 6.4 In-line ejection is set up to suit non-routine object and according to job specifications
7. Conduct proof run	7.1 Material to be used for proof is organised correctly 7.2 Machine is operated according to manufacturer's and enterprise procedures to produce a specified proof 7.3 Proof is visually inspected and/or tested or laboratory testing organised according to enterprise procedures 7.4 Production does not commence without client approval or authority, where appropriate 7.5 Results are interpreted and adjustments are carried out according to product and machine specifications to determine adjustment requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 4.1, 4.3, 4.4, 4.6, 5.1, 5.3, 5.4, 6.1-6.4, 7.5	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications
Writing	4.5, 4.6, 7.4	Completes records accurately and according to workplace requirements
Oral Communication	7.4	Participates effectively in spoken interactions using appropriate vocabulary, questioning and listening techniques to gain approvals
Numeracy	4.4	Uses basic mathematical calculations to calculate weight, volume and formula ratios
Navigate the world of work	4.3, 4.6, 7.2-7.4	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with	7.4	Follows accepted communication practices and

others		protocols when seeking approval
Get the work done	1.1-1.3, 2.1, 2.2, 3.1-3.3, 4.1-4.6, 5.1-5.4, 6.1-6.4, 7.1-7.3, 7.5	• Takes responsibility for planning and organising own workload using analytical processes to decide on a course of action, and assembles required resources • Recognises and addresses some unfamiliar problems of increasing complexity within own scope, • Reads data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN441 Set up for complex pad printing	ICPPR441C Set up for complex pad printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN441 Set up for complex pad printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up a machine for complex pad printing on TWO occasions (if possible, on different substrates) according to manufacturer's and job specifications, enterprise procedures and the performance criteria.
- set up pad printing machines for non-routine print jobs, including for manual pre- and post-treatment processes
- conduct a proof run and adjust settings to ensure production speeds are attained

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify different substrate groups and suggest correct ink type for each group
- identify plastic subgroups for purpose of ink selection
- explain how adjustments are made to process colour inks for correct colour balance
- describe methods of improving opacity of a light coloured ink on a dark substrate
- determine correct pad shape for (given) applications
- describe the effect pad shape and hardness have on print quality
- describe the effect commonly seen at the contact point of the nipple of a pad in a large solid print, and how can it be avoided
- explain how to prepare a new pad for its first printing
- determine the correct plate type for (given) applications
- outline the difference between steel and photopolymer plates for process printing
- provide reasons for mis-registered images and how can they be corrected
- identify work health and safety (WHS) concerns of setting presses and doctor blades
- describe adjustments made to the machine so the doctor blade operates correctly

- outline consequences of a damaged doctor blade
- identify different types of doctor blades and explain their applications
- identify WHS concerns of pre- and post-treating substrates
- describe common pre- and post-treatment methods for different substrates and their importance
- identify causes of, and solutions for, common print problems (e.g. hairlines around image, loss of density in the centre of a solid image, fine lines of ink running through image, distortion of image, picking up ink from substrate by subsequent pads, washed out images, loss of fine lines in images, inconsistent colour)
- locate machine manuals, safety and other documentation relevant to this task and outline the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment and materials, including a pad printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN442 Produce specialised pad printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to operate a pad printing machine to produce specialised printed products that meet required quality standards. Any production problems are rectified with minimum downtime, and the machine is correctly shut down and cleaned according to work health and safety (WHS) guidelines.

It applies to individuals working as print machinists in the printing and graphic arts industry. They prepare material, set up, monitor and operate equipment and machinery, apply solutions to a defined range of problems associated with the print medium, and analyse and evaluate information from a variety of sources. They may also provide leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain specialised pad printing process	1.1 Location of objects into fixtures is monitored, evaluated and adjusted if necessary 1.2 Printing plates condition is monitored and evaluated to ensure quality of printed product meets the approved proof standard

ELEMENT	PERFORMANCE CRITERIA
	1.3 Printing pads condition is monitored, evaluated and maintained to ensure quality of printed product meets the approved proof standard 1.4 Spatulas and doctor blades are monitored, evaluated and adjusted to ensure quality of printed product meets the approved proof standard OR 1.5 Ink cups are monitored, evaluated and adjusted to ensure quality of printed product meets the approved proof standard 1.6 Printing ink viscosity is monitored, evaluated and adjusted to ensure quality of printed product meets the approved proof standard
2. Maintain in-line systems	2.1 In-line loading is monitored, evaluated and adjusted to ensure quality of printed product meets the approved proof standard 2.2 In-line pre-treatment is monitored, evaluated and adjusted to ensure quality of printed product meets the approved proof standard 2.3 In-line drying is monitored, evaluated and adjusted to ensure quality of printed product meets the approved proof standard
3. Maintain production process	3.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.2 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 3.3 Manual and/or automatic control is used as required according to job specifications 3.4 Performance is monitored and verified using the process control system according to enterprise procedures 3.5 Ink performance, colour, register and position of print are monitored and adjusted throughout production run 3.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.7 Process adjustments to eliminate problems are reported according to enterprise procedures 3.8 Waste is sorted according to enterprise procedures
4. Tune and adjust	4.1 Idiosyncrasies of machines are reviewed and adjustments or tuning undertaken to compensate, or to exploit the idiosyncrasy,

ELEMENT	PERFORMANCE CRITERIA
machinery	within manufacturer's specifications 4.2 Options are assessed to determine most effective/efficient method of production, ensuring highest quality and yield from machinery 4.3 Test run confirms correct options and settings, or need for further adjustment or tuning to meet quality standards 4.4 Options and recommendations are documented for future reference according to enterprise procedures 4.5 Instruction on new practices is provided to machine operator or finisher, if required
5. Troubleshoot machinery and material problems	5.1 Corrective or preventive action is recommended and implemented where appropriate 5.2 Changes are communicated to relevant personnel in a logical and easily understood manner 5.3 Changes are monitored to confirm improvement to production efficiency 5.4 Ongoing problems are reported according to enterprise procedures
6. Conduct shutdown of production process	6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 6.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 6.3 Unused ink is correctly labelled and stored according to manufacturer's/supplier's specifications and enterprise procedures 6.4 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 6.5 All product is removed from operating area 6.6 Machine faults requiring repair are identified and reported, according to enterprise procedures 6.7 Repair/adjustment is verified prior to resumption of operations

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	3.2, 3.3, 4.1, 6.1, 6.3	Recognises and interprets text to establish job requirements from information contained in instructions, relevant procedures and specifications
Writing	3.7, 4.4, 4.5, 5.1, 5.2, 5.4, 6.3, 6.6	Completes records, forms and other documents accurately, and according to workplace requirements
Oral Communication	3.1, 3.7, 4.2, 4.5, 5.1, 5.2, 5.4, 6.2, 6.6	Participates effectively in discussions using appropriate vocabulary, and questioning and listening skills
Navigate the world of work	3.1, 3.2, 3.4, 3.7, 3.8, 4.4, 5.4, 6.1-6.4, 6.6	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	3.1, 3.7, 4.2, 4.5, 5.1, 5.2, 5.4, 6.2, 6.6	- Collaborates and cooperates with others to achieve joint outcomes - Contributes to workgroup discussions using accepted conventions - Selects and uses appropriate communication practices when reporting issues
Get the work done	1.1-1.6, 2.1-2.3, 3.1-3.6, 3.8, 4.1-4.3, 5.1-5.4, 6.1-6.7	- Determines priorities and sequences steps involved in familiar tasks and identifies, and assembles required resources - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - May invest time in developing and evaluating several options before making a final choice, identifying some key principles that may be relevant in future situations - Reads data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN442 Produce specialised pad printed product	ICPPR442C Produce specialised pad printed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN442 Produce specialised pad printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- operate a pad printing machine ensuring an efficient specialised production flow that maintains product quality standards, including rectifying production problems with minimum downtime, and shutting down and cleaning the machine according to work health and safety (WHS) guidelines
- produce TWO complex pad printing jobs (if possible on different substrates) according to job specifications, enterprise procedures and performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify major WHS concerns when operating this machine
- locate where Material Safety Data Sheets (MSDS)s are stored and describe the information they contain
- explain how colour density of a light image on a dark substrate can be improved by selecting a different machine cycle mode
- explain how to select appropriate machine cycle mode to provide the highest production output for a particular product
- describe special cycle modes available on the machine and their application
- describe how to determine that ink has been mixed to the correct viscosity
- explain how to correct ink viscosity during production
- list causes of unreleased ink remaining on the printing pad, and how to identify them
- describe the effect of adding a catalyst on the pot life of ink and other factors that affect pot life
- explain how to recognise a damaged pad

- demonstrate the correct method of cleaning a pad during production
- describe the effect of different pad shapes for different colours In multi-coloured printing
- determine the time ink should take to cure before scratch and adhesion tests can be performed
- describe the method used to check for correct pre-treatment of polypropylene during production
- explain how to ensure correct drying conditions for the product
- describe the visible effects on the image if ink viscosity is incorrect
- identify the cause of incorrect registration and how to prevent its recurrence
- explain what can cause a fine coating of ink over the whole cliché surface
- locate machine manuals, safety and other documentation relevant to this task, and outline the information in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment and materials, including a pad printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN451 Set up for complex relief printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up reel – sheet-fed platen, cylinder or rotary printing machines for non-routine relief printing jobs.

It applies to skilled individuals working as a print machinist in the printing and graphic arts industry who may prepare material, setup, monitor and operate equipment and machinery, analyse and evaluate information applying solutions to a defined range of problems and who may also provide leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm non-routine job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is planned and carried out correctly in minimum time with minimum waste 1.3 Availability of all job related components is checked

ELEMENT	PERFORMANCE CRITERIA
2. Set up delivery systems	2.1 Delivery systems are set up and adjusted according to job specifications 2.2 Substrate is added to and removed from process according to job specifications
3. Select and prepare inks and additives	3.1 Inks, dyes or additives are selected according to job specifications and end-user requirements 3.2 Quality and suitability of inks, dyes or additives are checked and appropriate action is taken 3.3 Inks, dyes and additives are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 3.4 Correct colour and weight/volume of ink are mixed and prepared to match the requirements of the printing process and job specifications 3.5 Formulation of the ink, colour match and the approved colour are appropriately recorded 3.6 Inks, dyes and additives are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions to prevent damage and hazards to personnel and prolong shelf life
4. Set up machine for complex relief printing	4.1 Appropriate relief plates are selected and secured to the machine 4.2 Relief polymer plates/forme are set up and adjusted according to job specifications (platen) 4.3 Relief polymer cylinders are set up and adjusted according to job specifications (platen) 4.4 Impression is set up and adjusted according to job specifications (platen and rotary) 4.5 Inking system is set up and adjusted according to the relief process and job specifications (platen and rotary) 4.6 Drying system is set up and adjusted according to job specifications
5. Conduct proof run	5.1 Material to be used for proof is organised correctly 5.2 Machine is operated according to manufacturer's and enterprise procedures to produce a specified proof 5.3 Proof is visually inspected and/or tested or laboratory testing organised according to enterprise procedures 5.4 Production does not commence without client or relevant

ELEMENT	PERFORMANCE CRITERIA
	authority approval where appropriate 5.5 Results are interpreted and adjustment changes are carried out according to product and machine specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1, 3.3, 3.4, 3.6, 5.4.2-4.6, 65.5	Recognises and interprets text to establish the job requirements from information contained within relevant instructions, procedures and specifications
Writing	3.5, 3.6, 5.6.4	Completes records and labels accurately and according to workplace requirements
Oral communication	5.4	Participates effectively in spoken interactions using appropriate vocabulary, questioning and listening techniques to gain approvals
Numeracy	3.4, 65.5	Uses simple mathematical calculations to select weight and volume of ink and ensure optimum output
Navigate the world of work	3.3, 3.5, 3.6, 5.2-5.4	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	5.4	Follows accepted communication practices and protocols when seeking approval
Get the work done	1.1-1.3, 3.1-3.6, 4.1-4.6, 5.1-5.3, 5.5	- Determines priorities and sequences the steps involved in clearly defined, familiar tasks and identifies and assembles the resources required - Responds to predictable problems and implements standard or logical solutions related to the role in the immediate work environment - Reads data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• Reel OR • Sheet
Setting up and adjusting MUST include EITHER:	• Unwind and rewind reels • Webbing procedures and web control system • Splicing/joining reels • Printed web viewing devices • Folder and sheeter • Set off/marketing prevention devices OR • Feeder and delivery systems • Sheet pick-up and transportation systems • Transfer and control systems • Set off/marketing prevention devices

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN451 Set up for complex relief printing	ICPPRN451C Set up for complex relief printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN451 Set up for complex relief printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up reel or sheet-fed platen, cylinder or rotary printing machines for non-routine print jobs
- conduct a proof run and adjust settings to ensure production speeds are attained
- correctly set up a relief printing machine for complex printing on TWO occasions (if possible using different substrates and including at least two in-line processes) according to manufacturer's and job specifications, enterprise procedures and work health and safety (WHS) requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

Evidence of the ability to:

- identify job requirements, and production problems that could eventuate by not reading and understanding job specifications
- identify who to discuss any production problems with to
- identify importance of relief plates, why hardness of the printing plate is important, and faults that may be detected on new plates
- identify type of solvents to use on photopolymer plates
- outline the purpose of binding plates after mounting, and explain V-block mounting
- list checks to perform prior to cylinder installation
- outline importance of machine frames, and why unit slides need to be kept clean
- identify the optimum print sequence
- name the visual aid on the plate that identifies the colour of ink to be used

For reel systems only

- outline WHS precautions for installing printing cylinders in the machine
- identify precautions to ensure plate/cylinders are not damaged during installation
- outline the reel transportation system used on a web-fed machine, and the WHS precautions for when webbing up the machine
- identify implications if the web is not spiced correctly
- describe the process of determining position of the reel
- outline implications if the brake tension is not set correctly
- describe the function of the 'dancer' roller on a web machine and the function of nip rollers
- outline the reel delivery system on a web-fed machine, and the WHS precautions for when setting up the reel delivery system
- identify the function of web control in the rewind unit, and the slitter on a web machine
- identify problems attributable to a blunt knife when sheeting
- describe remedial steps if there is a possibility of ink marking in the rewind
- list the main reason for blistering on a heat set machine
- outline WHS precautions when slitting on the machine, and other operations that can be performed with in-line units
- describe the machine position for in-line processing units and \ precautions for setting up in-line processing units
- list reasons to top cut a printed product, and benefits of embossing in-line

For sheet systems only

- outline the sheet transportation system on a sheet-fed machine, and WHS precautions for setting up the sheet transportation system
- identify what causes more than one sheet to pick up in the feeder and describe why accurate feeder set up is essential
- outline the process for determining position of the sheet prior to being transferred to the printing unit
- outline the process for determining which front lays to use and the types of substrate that require additional front lays to be engaged, and why they are required
- describe the sheet delivery system on a sheet-fed machine, what causes sheets to be delivered incorrectly, and WHS precautions for removing sheets from the delivery
- describe adjustments needed if changing from lightweight to heavyweight stocks
- identify the process for determining sheet release into the delivery
- outline problems from excessive use of anti-set off spray powder
- identify what causes printed sheets to set off in the delivery
- identify how the possibility of set off in delivery can be reduced and how air blast assists sheet delivery
- outline packing required in the tympan, and the ideal condition of the tympan
- identify the process for determining printing pressure
- outline how the correct top sheet tension is achieved when fitting a new tympan, and print faults that can occur if the tympan is not tensioned correctly

- identify how to lengthen print length on this type of press, and to shorten the print length
- outline WHS concerns related to preparation of inks and additives, and details required to check inks' suitability for the printing process
- outline why it might be necessary to mix an additive into ink and any special end-use requirements that may be necessary
- outline how a spectrophotometer can be used to assess ink colour, and formula for calculating the correct quantity of ink in relief printing
- identify print faults if excessive driers are mixed into ink, and precautions to minimise waste when preparing ink
- identify the shelf life of most ink and the conditions relevant to storage of inks and additives
- list conventions for labelling mixed inks
- identify the process for setting up the printing machine and major WHS concerns
- name the order eccentric or concentric roller adjustments should be made and the width of the contact stripe between two rollers
- outline the process for determining ink duct setting, and the ideal setting
- name recommended degrees shore hardness for forme rollers
- describe types of ink drying/curing systems and how the drying unit cures ink
- state what happens if there is excessive pressure when top cutting and excessive pressure when cutting and creasing
- describe the effect of differing tooth counts on perforated products
- outline problems of solving proofing and adjustment
- outline the operation of the true inch function fitted to some machines, and problems that may cause the machine to keep stopping
- outline checks necessary prior to engaging the impression, and checks to be performed when running the machine
- describe the effect position of certain guards has on operation of the machine
- outline steps involved in operating the machine communicated to other team members
- name aids available for testing the machine proof, where testing should take place, and tests necessary for each job
- name the function of a polarisation filter in a densitometer
- describe ideal conditions for inspecting the proof
- explain why it is necessary to use visual aids on the printed substrate
- describe causes of a halo effect on the image
- outline methods to check and adjust ink colour and consistency
- describe adjustments that may cause mis-register
- describe adjustments to position the image laterally and circumferentially
- explain how changing colour sequence can effect the final colour cast
- identify causes of excessive mechanical dot gain and the difference between mechanical and optical dot gain
- describe the process for final approval before a print run
- identify machine manuals, safety and other documentation relevant to this task, where are they kept, information included in these documents, and other sources of available information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- reel or sheet-fed platen, cylinder or rotary printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN452 Produce specialised relief printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce a specialised relief printed product operating a platen, cylinder or rotary printing machine.

It applies to individuals who use specialised knowledge to problem-solve and experiment to obtain optimal results and a quality product with minimum production problems or downtime.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain specialised relief printing process	1.1 Relief polymer forme or plate cylinder condition is monitored, evaluated and adjusted to ensure quality of the specialised printed product meets the sample sheet standard 1.2 Relief polymer impression surface condition is monitored, evaluated and adjusted to ensure quality of specialised printed product meets the sample sheet standard 1.3 Relief polymer inking system is monitored, evaluated and adjusted to ensure quality of specialised printed product meets the sample sheet standard

ELEMENT	PERFORMANCE CRITERIA
	1.4 Drying systems are monitored, evaluated and adjusted to ensure quality of specialised printed product meets the approved proof standard
2. Maintain production process	2.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 2.2 If required, in-line printing/converting/binding/finishing processes are monitored and adjusted to ensure quality of product meets the approved proof standard 2.3 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 2.4 Manual and/or automatic control is used as required according to job specifications 2.5 Performance is monitored and verified using the process control system according to enterprise procedures 2.6 Ink performance, colour, register and position of print are monitored and adjusted throughout production run 2.7 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 2.8 Process adjustments to eliminate problems are reported according to enterprise procedures 2.9 Waste is sorted according to enterprise procedures
3. Tune and adjust machinery	3.1 Idiosyncrasies of machines are reviewed and adjustments or tuning undertaken to compensate, or to exploit the idiosyncrasy, within manufacturer's specifications 3.2 Options are assessed to determine most effective/efficient method of production, ensuring highest quality and yield from machinery 3.3 Test run confirms correct options and settings, or need for further adjustment or tuning to meet quality standards 3.4 Options and recommendations are documented for future reference according to enterprise procedures 3.5 Instruction on new practices is provided to machine operator or finisher, if required
4. Troubleshoot machinery and material problems	4.1 Corrective or preventive action is recommended and implemented where appropriate 4.2 Changes are communicated to relevant personnel in a logical

ELEMENT	PERFORMANCE CRITERIA
	and easily understood manner 4.3 Changes are monitored to confirm improvement to production efficiency 4.4 Ongoing problems are reported according to enterprise procedures
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Unused ink is correctly labelled and stored according to manufacturer's/supplier's specifications and enterprise procedures 5.4 Solid and liquid waste is removed from operating area, and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.5 All product is removed from operating area 5.6 Machine faults requiring repair are identified and reported, according to enterprise procedures 5.7 Repair/adjustment is verified prior to resumption of operations

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.2, 2.4, 2.5, 3.1, 5.1-5.3	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications
Writing	2.8, 3.4, 4.1, 4.4, 5.3, 5.6, 5.7	Completes records, forms and other documents accurately and according to workplace requirements
Oral Communication	2.1, 2.8, 3.5, 4.1, 4.2, 4.4, 5.2, 5.6	Participates effectively in discussions using appropriate vocabulary, questioning and listening skills
Navigate the world of work	2.1, 2.3, 2.5, 2.8, 2.9, 3.4, 4.4, 5.1-5.4,	Complies with legislative requirements and follows organisational policies and procedures relevant to own role

	5.6	
Interact with others	2.1, 2.8, 3.5, 4.1, 4.2, 4.4, 5.2, 5.6	• Collaborates and cooperates with others to achieve joint outcomes • Contributes to workgroup discussions using accepted conventions • Selects and uses appropriate communication practices when reporting issues
Get the work done	1.1-1.4, 2.1-2.7, 2.9, 3.1-3.5, 4.1, 4.3, 5.1-5.7	• Determines priorities and sequences steps involved in complex tasks and identifies and assembles required resources • Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans, and begins to look behind obvious symptoms to redefine problems and identify underlying causes • Recognises potential of new approaches to enhance work practices • Understands purposes, specific functions and key features of digital systems and tools and operates them effectively

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN452 Produce specialised relief printed product	ICPPR452C Produce specialised relief printed product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN452 Produce specialised relief printed product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- operate a platen, cylinder or rotary printing machine to produce a specialised printed product that maintains product quality standards, including anticipating and rectifying production problems, minimum downtime, and cleaning and shutting down the machine according to work health and safety (WHS) guidelines
- access and use information relevant to the task from a variety of information sources
- monitor production output and make necessary adjustments to maintain print quality on a relief printing machine while producing a specialised print on TWO occasions (if possible using different substrates and if possible including at least two in-line processes) according to job specifications, enterprise procedures and the performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline major WHS concerns of setting up the reel transportation system
- identify reel wander cause
- explain cause of web break at the unwind unit
- identify a print fault resulting from the reel being run out of centre
- describe possible faults in the unwind section that can cause a web break
- outline WHS concerns of operating the sheet transportation system
- describe the result of worn suckers at the feeder suction head
- describe sheet detection types for particular machines
- describe how much movement the sheet should have when being registered by the side lay
- explain the cause of mis-register of the sheet at the feeder

- identify visible signs of the sheet being registered in the feeder
- explain the gripper malfunction effect on sheet control and transfer
- describe adjustment of the sheet transfer mechanisms
- describe what causes the feeder stack to become uneven
- describe what happens if the feeder stack loaded unevenly
- explain how to rectify unevenness of the feeder stack
- outline WHS risks associated with rewinding and sheeting
- identify a safety feature in the delivery system for when the web jams up
- explain sheet cut-off wander
- describe the effect of poorly adjusted nip rollers when rewinding and sheeting
- describe the effect machine speed has on sheet delivery
- explain the advantage of spraying moving sheets with anti-set off powder in the delivery
- identify items in the delivery that can cause marking of the printed image
- outline remedial steps to eliminate marking of the printed image
- explain faults caused by from incorrectly set grippers in the transfer section of a machine
- describe adjustments to devices to maintain sheet control in the delivery
- describe what happens if the plate lifts at the grip edge during a print run
- describe the effect on the printed product of build-up of ink on the impression cylinder
- explain what causes ink to lie back in the duct
- describe how to rectify the problem of paper surface picking
- explain the cause of diminished impression during the print run
- explain what causes the plate surface to prematurely wear during production
- describe the effect of eating or drinking near the machine when using UV inks
- explain the link between driers and set off and marking
- explain what causes UV ink to dry
- explain the cause of substrate blistering
- describe the effect of incorrect drying temperature on the finished product
- describe the effect of inadequate communication within the work team on a lithographic printing machine
- outline safety features within the organisation that aid in maintaining effective production
- outline ramifications if machine guards are removed and/or micro switches are disconnected on a machine
- explain legal responsibilities relating to removal of machine guards and/or disconnection of micro switches
- identify other measurement, besides optimum solid ink density, to assess print quality
- describe the most accurate method of checking register during a production run
- explain reasons to take immediate action when production problems are anticipated
- identify actions taken to eliminate further processing of unacceptable printed product
- describe the effect on a stack of paper if relative humidity is increased in the press room
- outline the procedure to care for a newly delivered skid of paper to the press room
- explain steps involved in waste sorting
- identify advantages of keeping reusable waste
- outline industry standards to enhance effective communication with clients

- identify necessary procedures clients should follow to approve a printed product
- identify situations when it is necessary to call service personnel to correct a machine problem
- identify enterprise procedures in place to report any machine operating problems
- explain the result if correct shutdown procedures were not followed
- explain the need for correct shutdown procedures conducted with fellow workers
- identify advantages of proper labelling and storage of excess inks and materials
- explain reasons for clear labelling of printed product prior to removal from the press room
- describe the use of completed records in final analysis of the job
- outline benefits of comprehensive records when considering production of future jobs
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and information included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- platen, cylinder or rotary printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN471 Set up for complex coating

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up non-routine coating that includes set up of rollers and the reel or sheet systems for coating a range of carbon, carbonless, latex, wax, resin and metallic coatings, aqueous and UV varnishes and machine varnishes.

It applies to individuals who use specialised knowledge and planning, organising and problem-solving skills to ensure production speeds are attained and quality standards are met.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is planned and carried out correctly and in minimum time 1.3 Availability of all job related components is checked
2. Set up delivery systems	2.1 Delivery systems are set up and adjusted according to job

ELEMENT	PERFORMANCE CRITERIA
	specifications 2.2 Substrate is added to and removed from process according to job instructions
3. Select and prepare coating	3.1 Coating is selected according to job specifications and end-user requirements 3.2 Quality and suitability of coating is checked and appropriate action taken 3.3 Coatings and additives are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 3.4 Correct weight/volume of coating is prepared to match requirements of the job specification and coating process 3.5 Coating viscosity is confirmed as correct for the job 3.6 Formulation of coating is appropriately recorded
4. Set up machine for coating	4.1 Appropriate rollers/cylinders are selected and secured to the machine and set 4.2 Application system is set up and adjusted according to job specifications 4.3 Appropriate anilox roller is chosen, and installed to manufacturer's specifications 4.4 Set doctor blades to manufacturer's specifications 4.5 Coating delivery system is set up with correct flow and return flow determined by air pressure or pump speeds and adjusted according to job specifications 4.6 Coating blanket is cut or a plate installed for non-image areas 4.7 Blanket or plate packing is checked as suitable to the job 4.8 Coating temperature is checked and deemed suitable for the job 4.9 Drying system is set up and adjusted according to job specifications
5. Conduct proof run	5.1 Material to be used for proof is organised correctly 5.2 Machine is set up and operated, and roller and pressure settings are checked, to produce a specified proof according to WHS requirements, manufacturer's specifications and enterprise procedures 5.3 Proof is visually inspected and/or tested or laboratory testing

ELEMENT	PERFORMANCE CRITERIA
	organised according to enterprise procedures 5.4 Production does not commence without client approval or authority where appropriate 5.5 Results are interpreted and adjustments are carried out according to product and machine specifications to determine adjustment requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1, 3.3, 3.4, 4.2-4.5, 4.9, 5.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.6, 5.4	Completes records accurately and according to workplace requirements
Oral Communication	5.4	Participates effectively in spoken interactions using appropriate vocabulary, questioning and listening techniques to gain approvals
Numeracy	34, 4.5	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	3.3, 5.2-5.4	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	5.4	Follows accepted communication practices and protocols when seeking approval
Get the work done	1.1-1.3, 3.1-3.5, 4.1-4.6, 4.9, 5.1-5.3, 5.5	- Plans, identifies and assembles resources required to complete tasks - Determines priorities and sequences steps involved in clearly defined, familiar tasks - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment - Reads data from electronic monitoring and control

		systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• reel OR • sheet
Setting up and adjusting MUST include EITHER:	• unwind • webbing procedures • splicing/joining reels • print web viewing devices • set off / marking prevention devices OR • feeder and delivery • sheet pick-up and transportation system • transfer and control systems • set off / marking prevention devices

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN471 Set up for complex coating	ICPPR471C Set up for complex coating	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN471 Set up for complex coating

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up for THREE complex coating operations (one spot coating, one overall coating and one fine detail, using three different coatings of which one must be metallic, and include at least one in-line process), including:
 - setting up rollers and reel or sheet systems for coating a range of carbon, carbonless, latex, wax, resin and metallic coatings, aqueous and UV varnishes and machine varnishes
- conduct a proof run and adjusting settings to ensure production speeds are attained
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe key information on the work ticket listing type of coating required
- describe what to do if vital information is missing from the job ticket
- list checks to do prior to set up (availability of materials etc.)
- describe how to choose the coating side of material
- describe the effect of offside lay selection on the job
- explain how to carry out a register check

For reel systems only

- describe the effect of:
 - low web tension on the print
 - inefficient web splices

- explain how to:
 - determine reel position for the job
 - check for a web break
- identify safety risks associated with rewind of the machine
- outline the effect of excessive web tension at rewind of the machine

For sheet systems only

- explain how to:
 - determine sheet position for the job
 - select appropriate front lays
 - check a missing or late sheet
- explain use of a two-sheet cut out on most feeders (sheet)
- describe the effect of:
 - not enough coating on a sheet
 - excessive temperature on the sheet
- describe the effect too much vacuum on the slow-down wheels has on the job
- describe how to determine position of register or bustle wheels
- describe the effect excessive jogging has on the stack
- identify major WHS concerns when setting up the sheet or reel transportation system
- identify WHS concerns relevant to the use of coatings
- list types of coatings and their applications
- explain suitability of the coating for the job
- explain how the coat adheres to the product
- identify the amount of coating required
- describe the range of viscosities to run with on an aqueous coating
- describe the effect of incorrect viscosity on coating
- explain how to adjust viscosity of a coating
- describe methods to solidify coating
- explain drying UV coating
- describe the printing principle being utilised to apply aqueous coating
- explain why gluing tabs are not coated
- identify the temperature the drier is set at to dry aqueous coating
- explain when to use different image carriers (plate or blanket)
- outline the effect skeleton wheels can have on the coating surface
- describe how to measure the amount of gloss on the surface
- outline organisational responsibility for the final approval on the job
- describe the effect in the following scenarios:
 - UV coating on a wet print
 - viscosity is too high or too low
 - ink coverage is excessive, i.e. over 250%

- identify key types of information in, and the location of, machine manuals, safety and other documentation relevant to this task.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment, and materials, including a dedicated coating machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN472 Produce complex coated product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce complex, coated product on either a reel- or sheet-fed machine.

It applies to individuals who use specialised knowledge and organising and problem-solving skills to ensure efficient production flow and product quality standards are met.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain operations of delivery systems	1.1 Delivery systems are monitored and adjusted to ensure efficient and continuous operation and avoid damage to finished product 1.2 Substrate is added to and removed from process according to job instructions
2. Maintain coating process	2.1 Roller condition is monitored and adjusted to ensure quality of printed product meets the approved proof standard 2.2 Coating system and doctor blade condition (if appropriate) are

ELEMENT	PERFORMANCE CRITERIA
	monitored and adjusted to ensure quality of product meets the approved proof standard 2.3 Drying systems are monitored and adjusted to ensure quality of product meets the approved proof standard 2.4 Quality and viscosity of varnish coatings are monitored and adjusted as necessary to ensure product quality
3. Maintain production process	3.1 Basic or complex in-line printing/converting/binding/finishing processes are monitored and adjusted to ensure quality of product meets the approved proof standard 3.2 Production process is operated in association with fellow workers and according to company specifications and planned daily schedule 3.3 Production is maintained within work health and safety (WHS) requirements, and company and manufacturer's specifications 3.4 Manual and/or automatic control is used as per specification 3.5 Performance is monitored and verified using the process control system according to enterprise procedures 3.6 Coating performance, register and position are monitored and adjusted throughout production run 3.7 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.8 Process adjustments to eliminate problems are reported according to enterprise procedures 3.9 Waste is sorted according to enterprise procedures
4. Identify and rectify problems	4.1 Faulty performance of equipment is identified and reported according to enterprise procedures 4.2 Problems in coating machine are identified and reported according to enterprise procedures 4.3 Adjustments or corrections are carried out according to specified procedures and consistent with operator's skill level 4.4 Coating machine operation is checked to ensure correct operation
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Solid and liquid waste is removed from operating area and

ELEMENT	PERFORMANCE CRITERIA
	recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.4 All product is removed from operating area 5.5 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 5.6 Repair/adjustment is verified prior to resumption of operations
6. Clean and wash up coating machine at end of print run	6.1 Cylinders, plate and roller surfaces are cleaned ready for next run 6.2 Coating delivery system is washed ready for next run, and liquid waste is disposed of according to company and regulatory requirements 6.3 In-line slitting units are cleaned ready for next run 6.4 Reef feed, transportation and delivery systems are disengaged and cleaned ready for next run 6.5 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	3.2-3.4, 4.3, 5.1	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications
Writing	3.8, 4.1, 4.2, 5.5, 6.5	Completes records, forms and other documents accurately and according to workplace requirements
Oral Communication	3.2, 3.8, 4.1, 4.2, 5.2, 5.5	- Participates effectively in discussions using appropriate vocabulary, questioning and listening skills - Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Navigate the world of work	1.1, 1.2, 3.2, 3.3, 3.5, 3.8, 3.9, 4.1-4.4, 5.1-5.3, 5.5, 76.1-6.5	- Complies with legislative requirements and follows organisational policies and procedures relevant to own role - Recognises and follows all procedures for cleaning and

		maintenance of equipment, incorporating regulatory requirements and enterprise procedures
Interact with others	3.2, 3.8, 4.1, 4.2, 5.2, 5.5	• Collaborates and cooperates with others to achieve joint outcomes • Contributes to workgroup discussions using accepted conventions • Selects and uses appropriate communication practices when reporting issues
Get the work done	1.1-1.2, 2.1-3.4, 3.1-3.7, 3.9, 4.1-4.4, 5.1-5.4, 6.5, 6.1-6.4	• Determines priorities and sequences steps involved in clearly defined, familiar tasks • Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans • Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• reel OR • sheet
Monitoring and adjusting MUST include EITHER:	• reel stand and rewind section • web control system • sheeting section OR • feeder and delivery • sheet pick-up and transport system • transfer and control system

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN472 Produce complex coated product	ICPPR472C Produce complex coated product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN472 Produce complex coated product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- complete THREE complex coating jobs (one spot coating, one overall coating and one fine detail, using three different coatings – one of which must be metallic, and include at least one in-line process) including:
- producing a complex coated product on either a reel- or sheet-fed machine ensuring an efficient production flow maintaining product quality standards
- anticipate and rectify production problems with minimum downtime
- shutdown and clean the machine according to work health and safety (WHS) guidelines
- use control, monitoring and data entry systems
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline what to do if vital information is missing from the job ticket
- outline checks to do prior to set up (availability of materials etc.)
- identify major WHS concerns of:
 - setting up the sheet or reel transportation system
 - coating

For reel systems only

- describe the effect:
 - on the print of excessive tension on the rewinding reel

- if the web is not spliced correctly
- outline precautions to ensure the rewound product is of consistent, acceptable quality

For sheet systems only

- describe the effect of:
 - fanning sheets before loading into the press
 - anti-set off spray on finished job
- explain how to set and check the double sheet detector during the print run
- identify components that can be adjusted to ensure correct delivery in sheet systems
- identify printed material below acceptable standard
- outline what to do if the aqueous coating is smudging on the delivery section of the machine
- explain the effects of :
 - UV lamp on the UV coating
 - varying temperature and volume of hot and cold air knives
 - using IR radiation (including choice of medium or short wave lamps) on coatings
- identify the coating level to maintain in the pan
- explain dangers of solvents and solutions used to clean the coating system, plates, cylinders and press
- identify machine parts to be thoroughly cleaned following the coating of the job
- identify components to be inspected for wear following the print run
- identify records important for following or repeat prints
- identify key types of information in, and the location of, machine manuals, safety and other documentation relevant to this task.
-

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- print machine or a dedicated coating machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN484 Prepare for variable data printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to confirm data requirements and prepare and link data to a template ready for printing.

It applies to individuals who use analytical and technical skills to access complex information from databases to produce customised print runs.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm data requirements	1.1 Job specifications are reviewed to identify document purpose 1.2 Materials required for page design, layout and content are identified from job specifications 1.3 Source and format of data is determined and confirmed 1.4 Page design template is evaluated for printing purposes, and static and variable fields are correctly understood and labelled 1.5 Responsibility for data accuracy and other tests such as spell checks and postal software is agreed with client and in accordance

ELEMENT	PERFORMANCE CRITERIA
	with privacy legislation
2. Prepare data	2.1 Data required to populate copy holes in the variable-data template is established 2.2 Fields to be populated are confirmed and linked to data required to mark up copy holes in the variable-data template 2.3 Composition engine is used to achieve required data format and page layout requirements for merging variable data and static elements 2.4 Business rules are developed to reduce data errors and discrepancies (If possible, a data sample is obtained and preliminary checks run, making sure data and format is correct) 2.5 Soft proof is performed to ensure quality of all static and variable elements If high variability, RIPped data is spooled prior to printing to maintain higher engine speeds 2.6 Sample from the machine is produced and checked for conformance to job specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1-2.3, 2.6	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications
Writing	1.4, 1.5, 2.1, 2.4	Completes workplace forms and labels accurately
Oral Communication	1.5	Participates effectively in spoken interactions using appropriate vocabulary, and questioning and listening techniques to gain approvals
Navigate the world of work	1.5	Understands implications of legislative requirements for completion of tasks
Interact with others	1.5	Follows accepted communication practices and protocols when liaising with clients to seek agreement
Get the work	1.3, 1.4, 2.2-2.6	Takes responsibility for planning and organising own workload, identifying ways of sequencing and

done		- combining elements for greater efficiency and assemblies required resources • Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment • Uses digital equipment and reads data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN484 Prepare for variable data printing	ICPPR484C Prepare for variable data printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN484 Prepare for variable data printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use a database requiring sophisticated variable data fields and a complex page layout with multiple static and variable elements, both text and graphics, with flexible placement
- confirm data requirements and prepare data and link it to a template ready for printing on TWO different jobs.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe requirements for PPML/VDX, XML
- outline key aspects of privacy legislation relating to printing data
- explain key processes involved in database operation
- explain key concepts relating to data mining.
-

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to relevant computer hardware and software.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN491 Use on-press monitoring of print quality

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to use computerised print quality monitoring devices, involving selection of computerised settings to set up and run a press to acceptable tolerances.

It applies to individuals who use specialised knowledge and analytical skills to monitor quality, both electronically and visually, and to make adjustments to maintain print quality.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Set up print control devices	1.1 CIP3/CIP4 data, or equivalent, is used to create a profile 1.2 Job is made ready to achieve position, register and fit to specified standards 1.3 Colour is made ready to match appropriate colour standards 1.4 Data is interpreted and appropriate adjustments made to gain supervisor's approval to run press
2. Maintain print quality	2.1 Print is inspected visually to meet specified standards during

ELEMENT	PERFORMANCE CRITERIA
throughout run	run 2.2 Data is analysed against required standards 2.3 Appropriate adjustments are made to maintain consistency throughout run 2.4 Job is monitored and maintained at regular intervals to ensure quality

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.4, 2.1, 2.2	Checks printed texts against standards
Navigate the world of work	1.2, 1.3, 2.1, 2.2, 2.4	Complies with specific industry standards relevant to own role
Get the work done	1.1-1.4, 2.2-2.4	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency and assembles required resources - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment - Demonstrates a sophisticated understanding of principles, concepts, language and practices associated with the digital world

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN491 Use on-press monitoring of print quality	ICPPRN491C Use on-press monitoring of print quality	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN491 Use on-press monitoring of print quality

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- find and use information relevant to the task from a variety of information sources
- set up and align monitoring device to appropriate standards on THREE occasions – standards may be defined by enterprise/operator or default tolerances, client requirements, colour tolerances, and/or industry standards
- produce profiles of samples taken during THREE different print runs that show print production is within agreed tolerances, if possible, using different variables.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain colour theory of:
 - additive colours (light), red, green, blue (RGB)
 - subtractive colours (pigments), cyan, magenta, yellow, black (CMYK)
- discuss the relationship between ranges of visual colour RGB and CMYK
- outline International Colour Consortium (ICC) profiling
- describe underlying principles of densitometry and spectrophotometry
- explain how to determine tolerance in densitometry and spectrophotometry
- describe original colour control bar determinates
- outline how to determine accuracy of elements in a colour bar
- explain how to ensure consistent print quality output
- explain how to recognise colour contamination
- describe how to set alarm limits for colour contamination
- describe the process for accessing data and determining that data is appropriate

- explain the purpose of sampling to ensure consistency
- describe processes to put in place if sample varies from standard
- discuss ways quality can vary and how it can be fixed
- outline computerised functions, common faults and electronic registration systems
- describe information needed:
 - from pre-press to ensure quality product
 - to give to pre-press to ensure quality product
- define these terms: registration, fit, position and alignment
- explain the importance of registration marks.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work including access to a computerised printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN492 Use on-press print control devices

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to use computerised on-press print control devices.

It applies to press operators who access or input print quality data and perform adjustments to match the proof and maintain print quality throughout the run.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Set up print control devices	1.1 CIP3/CIP4 data is accessed for the next print run 1.2 Data is pre-set and options/parameters selected according to the next job specifications 1.3 Data is released to press according to manufacturer's recommended procedure 1.4 Accurate position and fit are attained 1.5 Approximate colour, density and ink/water balance, if applicable, are attained

ELEMENT	PERFORMANCE CRITERIA
	1.6 Make ready sheets are scanned or corrections are inputted until print matches the proof or client's requirements 1.7 Client or supervisor's approval is obtained prior to running the job
2. Maintain print quality throughout run	2.1 Print quality is continuously monitored visually 2.2 Sheets are scanned to verify visual assessment 2.3 Any correctional data is released to maintain print quality
3. Maintain equipment	3.1 Maintenance tasks are performed according to the operator's manual 3.2 Equipment is calibrated according to the operator's manual

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.6, 2.1	- Recognises and interprets text to establish job requirements from information contained within relevant manufacturer's instructions and manuals and job specifications - Checks printed texts against standards
Writing	1.7	Completes required documents accurately and according to workplace requirements
Oral Communication	1.7	Participates effectively in spoken interactions using appropriate vocabulary, questioning and listening to gain approvals
Interact with others	1.7	Follows accepted communication practices and protocols when seeking approval
Get the work done	1.1-1.6, 2.1-2.3, 3.1, 3.2	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Recognises and takes responsibility for addressing predictable, and some less predictable problems, in familiar work contexts - Demonstrates a sophisticated understanding of principles, concepts, language and practices associated

		with the digital world

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN492 Use on-press print control devices	ICPPR492C Use on-press print control devices	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN492 Use on-press print control devices

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- find and use information relevant to the task from a variety of information sources
- set up and align monitoring device to appropriate standards on THREE occasions –standards may be defined by enterprise/operator or default tolerances, client requirements, colour tolerances and/or industry standards
- produce profiles of samples taken during THREE different print runs that show print production is within agreed tolerances, if possible, using different variables.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe International Colour Consortium (ICC) profiling
- describe underlying principles of densitometry and spectrophotometry
- explain how to determine tolerance in densitometry and spectrophotometry
- describe original colour control strip determinates
- outline how to determine accuracy of elements in a colour strip
- explain how to ensure consistent print quality output
- explain how to recognise colour contamination
- describe how to set alarm limits for colour contamination
- explain the purpose of sampling to ensure consistency
- describe processes to put in place if sample varies from standard
- discuss ways quality can vary and how it can be fixed
- outline computerised functions, common faults and electronic registration systems
- describe information needed:

- from pre-press to ensure quality product
- to give to pre-press to ensure quality product
- define these terms: registration, fit, position and alignment
- explain the importance of registration marks.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to a computerised printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN493 Set up and monitor in-line printing operations

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up and monitor either a reel- or sheet-fed machine

It applies to individuals who possess a sound theoretical knowledge of in-line printing operations and who are responsible for digital production workflow.

No licensing, legislative or certification requirements apply to this unit at the time of publication

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is planned and carried out correctly in minimum time and with minimum wastage 1.3 Availability of all job related components is checked
2. Set up machine for in-line operation	2.1 Substrate transportation system is set up according to job specifications 2.2 Set off / marking prevention devices are set up and adjusted

ELEMENT	PERFORMANCE CRITERIA
	according to job specifications 2.3 Appropriate image carrier/cutting device is selected and secured to the unit 2.4 Impression is adjusted and set according to job specifications 2.5 Image transfer or inking devices are adjusted and set according to job specifications
3. Conduct proof run	3.1 Material to be used for proof is organised correctly 3.2 Machine is operated according to manufacturer's specifications and enterprise procedures to produce a specific proof 3.3 Proof is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 3.4 Production does not commence without client approval or authority where appropriate 3.5 Results are interpreted and adjustments made according to product and machine specifications
4. Maintain and monitor production process	4.1 Production process is operated and monitored in association with fellow workers and according to enterprise procedures and planned daily schedule 4.2 Product is monitored and minor adjustments made to ensure quality of output is maintained 4.3 Major adjustments to process are identified and reported to designated personnel according to enterprise procedures 4.4 Faulty performance of equipment is identified and reported to designated person according to enterprise procedures 4.5 Waste is sorted according to enterprise procedures
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with work health and safety (WHS) requirements 5.3 Unused ink/coating, if used in process, is correctly labelled and stored according to manufacturer's/supplier's specifications and enterprise procedures 5.4 All product is removed from operating area 5.5 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 5.6 Repair/adjustment is verified prior to resumption of operations

ELEMENT	PERFORMANCE CRITERIA
6. Clean and wash up	6.1 Cylinders, image carriers/cutting devices and roller surfaces are cleaned ready for next run 6.2 Image carriers/cutting devices are removed and stored according to manufacturer's/supplier's specifications and enterprise procedures 6.3 Inking system and additional units are washed ready for next run 6.4 Liquid waste is disposed of according to enterprise procedures and regulatory requirements 6.5 In-line units are cleaned ready for next run 6.6 Substrate feed, transportation and delivery systems are disengaged and cleaned ready for next run 6.7 Production records or other documentation are accurately completed where required by enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 2.2, 2.4, 2.5, 3.2, 3.5, 5.1, 5.3, 6.2	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications
Writing	3.4, 4.3, 4.4, 5.3, 5.5, 5.6, 6.7	Completes records, labels and other required documents accurately and according to workplace requirements
Oral Communication	3.4, 4.4, 5.2, 5.5	Participates effectively in discussions using appropriate vocabulary, questioning and listening
Navigate the world of work	3.2-3.4, 4.1, 4.3-4.5, 5.1-5.3, 5.5, 6.1-6.7	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	3.4, 4.4, 5.2, 5.5	- Collaborates and cooperates with others to achieve joint outcomes - Contributes to workgroup discussions using accepted conventions

		• Selects and uses appropriate communication practices when reporting issues
Get the work done	1.1-1.3, 2.1-2.5, 3.1-3.3, 3.5, 4.1-4.5, 5.1-5.6, 6.1-6.6	• Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency • Assembles and organises required resources • Recognises and takes responsibility for addressing predictable problems in familiar work contexts • Reads data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN493 Set up and monitor in-line printing operations	ICPPR493C Set up and monitor in-line printing operations	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN493 Set up and monitor in-line printing operations

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up and monitor in-line printing operations that tend to be complex in nature and incorporated into other printing processes
- set up and monitor one or more in-line processes on TWO occasions according to job specifications, enterprise procedures and performance criteria.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify important information from the job ticket
- explain what to do if vital information is missing from the job ticket
- describe devices to control the substrate in the in-line unit
- list problems typically caused by an incorrectly set transportation section
- discuss any work health and safety (WHS) concerns of setting up the in-line unit
- identify what other parts of the machine need to be set up prior to the in-line unit
- name parts of the in-line unit responsible for position
- outline precautions to be observed when setting the impression
- list checks to perform after a proof run on any in-line operation or process
- name the person to notify if there is a problem with any aspect of the job during make ready
- describe methods used to minimise waste during make ready
- describe signs of wear of the image carrier
- describe how printed material should be marked by the operator if it is below acceptable standard
- list print faults the operator identifies during the print run

- describe how frequently product quality should be assessed
- list WHS requirements to be observed during machine shutdown
- discuss what areas of the in-line unit may require repair
- explain how to determine workflow of the product
- name the person responsible for the repair of the machine
- outline procedures to be observed when storing image carriers or cutting devices
- discuss WHS concerns of storing cutting devices
- discuss procedures for disposal of liquid waste
- describe specific components of the in-line unit to be cleaned thoroughly
- discuss the effect on machine production if components are not cleaned thoroughly following print run
- outline what can happen if production information is not completed on the job ticket
- identify records to be completed in the event of a reprint or repeat print run.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- reel or sheet-fed machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN494 Apply advanced software applications to digital production

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to correctly select and use a variety of high-end software applications to efficiently produce a standard job.

It applies to individuals who create standard jobs that require the use of multiple applications in the digital production sector.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPPRN385	Apply software applications to digital production

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm client brief and job specifications	1.1 Details of client design brief and job specifications are reviewed and clarified with client or supervisor

ELEMENT	PERFORMANCE CRITERIA
	1.2 Type of documents are determined and production requirements are assessed 1.3 Client copy and images are assembled to conform to design brief 1.4 Software applications are assessed and selected to produce the job
2. Arrange elements on page	2.1 Guides are set and grid is displayed to ensure artwork meets job specifications 2.2 Elements are created and arranged on page with precise alignment 2.3 Elements are arranged in layers to allow for effective selection and re-arrangement 2.4 Imported text or data from other applications is correctly formatted and any cross-application formatting issues resolved 2.5 Text is formatted and flowed into document using most productive technique 2.6 Graphics and other elements are imported from other applications and are arranged according to design brief
3. Produce objects	3.1 Tools are used to produce objects and required attributes are entered and shapes manipulated, continuing until graphic framework is finalised 3.2 Lines and curves are adjusted and edited to fit design specifications 3.3 Objects are painted, transposed and strokes and effects are scaled according to design brief 3.4 Colours are created, edited and saved to colour palette and saturation of colour is adjusted 3.5 Colour and appearance attributes are selected and copied as required 3.6 Gradients, fills and patterns are used to paint and blend as required by layout and design brief
4. Edit images	4.1 Image is retouched to conform with job specifications 4.2 Colour and tone corrections are employed to conform to job specifications 4.3 An appropriate contouring technique is applied to produce the best result depending on the image 4.4 Edited image is saved in appropriate format to allow for import

ELEMENT	PERFORMANCE CRITERIA
	into other applications and to conform to job specifications 4.5 Image storage requirements are identified and employed
5. Produce publication-ready file	5.1 File is checked for errors in accordance with client brief and job specifications 5.2 Correct colour modes and libraries are used according to job specifications 5.3 Sufficient image resolution is applied according to output specifications 5.4 Bleeds and printer marks are applied as required 5.5 Completed file is sent to be ripped according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 2.1, 2.6, 3.2, 3.3, 4.1, 4.2, 4.4, 5.1-5.3	- Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications - Checks for errors by comparing text in prepared files against requirements
Oral Communication	1.1	Participates effectively in discussions using appropriate vocabulary, questioning and listening
Numeracy	3.4, 3.6, 4.2	Uses mathematical skills to determine image resolution
Navigate the world of work	5.5	Follows organisational policies and procedures relevant to own role
Interact with others	1.1	Selects and uses appropriate communication practices when liaising with others to gain approvals
Get the work done	1.1-1.4, 2.1-2.5, 3.1-3.6, 4.1-4.5, 5.1-5.5	Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency and assembles required resources

		• Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment • Reads data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN494 Apply advanced software applications to digital production	ICPPR494A Apply advanced software applications to digital production	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN494 Apply advanced software applications to digital production

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly use a variety of software applications to produce a standard layout
- identify and use information relevant to the task from a variety of information sources
- use at least TWO software applications to prepare two different sets of layouts according to enterprise standards.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain different qualities between file formats
- describe when to use one file format as opposed to another
- discuss type of file formats unsuitable for print-based jobs and other methods of publication
- identify different colour modes, and advantages and disadvantages of each
- list various colour libraries and how to select them within a software application
- outline printing and other publication processes used in digital production
- discuss the importance of considering printing and other publication processes during the design phase
- list types of problems that can occur if the printing and publications process isn't considered during design
- discuss different techniques to style text productively
- discuss different ways text can be flowed throughout a document
- describe how guides and rulers can be adjusted
- outline circumstances in which images are required to be edited or manipulated
- discuss why using colour profiles is required when preparing an image for publication

- outline image storage capabilities
- describe factors that may influence grey balance of an image.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- high-end computers
- output devices
- layout software.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN495 Set up and use complex colour management for production

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to create profiles and finger-print presses to obtain the best match across colour devices.

It applies to individuals who undertake complex colour management techniques to customise a workflow in their particular workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPPRN387	Use colour management for production

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Finger-print press	1.1 Suitable test charts are selected or produced 1.2 Press is optimised to workplace standard, in collaboration with

ELEMENT	PERFORMANCE CRITERIA
	press operator 1.3 Test chart is printed with standard ink densities on any one of a range of stocks
2. Measure press test charts	2.1 Colour measurement devices are calibrated and used to measure printed test charts 2.2 Multiple charts are measured and results recorded 2.3 Software is used to average multiple measurements
3. Create and use custom press profiles	3.1 Appropriate reference file is selected to match printed chart 3.2 Profiling software is used to create an output press profile from the averaged measurement file and profile is tested and edited if required 3.3 Profile is inserted into colour workflow
4. Create and use digital device profiles	4.1 Suitable test charts are selected 4.2 Device is calibrated and test chart is output or digitised 4.3 Test chart is measured using a colour measurement device 4.4 Appropriate reference file is selected to match test chart 4.5 Software is used to create a profile 4.6 Device profile is inserted into the colour workflow
5. Maintain custom colour management workflow	5.1 Printing conditions are monitored and recorded to ensure adherence to workplace standard 5.2 Digital devices are regularly calibrated

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Writing	2.2, 5.1	Completes records accurately and according to workplace requirements
Numeracy	2.1-2.3, 4.3	Uses colour measurement devices to perform calculations in relation to colour profiles

Navigate the world of work	1.2, 1.5	Complies with organisational policies and procedures relevant to own role
Get the work done	1.1-1.3, 2.1-2.3, 3.1-3.3, 4.1-4.6, 5.1, 5.2	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency and assembles required resources - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment - Utilises a broad range of digital features optimising software functions for specific purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN495 Set up and use complex colour management for production	ICPPR495A Set up and use complex colour management for production	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN495 Set up and use complex colour management for production

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- create custom device profiles in a digital production workflow to enhance the match across proofs, monitors and final products
- identify and use information relevant to the task from a variety of information sources
- complete THREE custom device profiles that have been used within a colour workflow
- produce a final product from the colour workflow.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list work health and safety (WHS) issues to be considered when managing colour for digital production
- discuss importance of bringing a device into a known state
- explain how often to calibrate devices
- outline what condition changes result in the need for re-calibration
- describe colour measurement devices and usage
- list various types of proprietary software used for colour measurement
- discuss comparison of test charts, their advantages and disadvantages
- describe the process of determining grey balance and white points
- identify colour profiles and their use
- describe the effect colour profiles have on output
- explain the difference between input, output and display profiles
- outline various colour management systems

- describe components of a colour management system
- outline components of a colour-managed workflow
- discuss red, green blue (RGB) versus cyan, magenta, yellow, black (CMYK), spot colour versus mixed colour workflows
- describe how to implement colour management on a system
- identify workplace and international publication and printing standards
- explain effects different substrates have on colour reproduction for proofing and final production
- describe how dot gain effects colour
- discuss under colour removal (UCR) and grey component replacement (GCR).

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- printing presses
- raster image processors (RIPs) with colour management features
- profiling software
- colour output devices
- densitometers and spectrometers.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN496 Set up and produce complex digital print

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up and produce complex digitally printed product. This unit incorporates the use of raster image processor (RIP) technology when outputting to digital devices including wide format.

It applies to individuals who produce complex digitally printed products in the commercial print, pre-press, bureau, high-end digital print or a combination of these business environments.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPPRN384	Set up and produce basic digital print

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Liaise with clients	1.1 A productivity analysis on a digital print system is performed

ELEMENT	PERFORMANCE CRITERIA
	to determine guidelines for most productive print method for a range of print applications 1.2 Print services, quality expectations and print costings are communicated to clients according to enterprise procedures 1.3 Productivity advantages and disadvantages of different digital print options are presented to clients according to enterprise procedures 1.4 Advice is provided to clients on appropriate substrates and document finishing methods for digital print jobs according to client budget and job specifications
2. Confirm job specifications	2.1 Print job specifications are read and correctly interpreted from job documentation or production control system 2.2 Availability of all job components is checked according to enterprise procedures 2.3 Finishing requirements of job are confirmed and coordination with internal workflow and/or outsource arrangements is maintained 2.4 Run time of job is determined and completion time is correctly estimated demonstrating consideration of other production demands
3. Set up and maintain digital print system	3.1 Substrate is loaded to correct reel or sheet feeding mechanism and all substrate properties are correctly specified in the user control interface 3.2 Delivery unit is set up on a machine and adjustments made to minor in-line processes on reel-fed machine or on-line finishing settings on sheet-fed machine 3.3 Preventive maintenance is performed on a digital printing system to ensure optimum quality and productivity are achieved 3.4 Common factors affecting print quality and productivity of a digital printing machine are identified and solutions implemented to minimise and/or eliminate these
4. Use complex features of RIP or front-end processor	4.1 Colour adjustments are made to ensure optimum image quality and/or to match sample 4.2 Output profiles are selected according to job specifications 4.3 An imposition method is selected to make best use of stock 4.4 Screen ruling is adjusted to ensure optimal output of job 4.5 Overprints and trapping are adjusted to achieve optimum

ELEMENT	PERFORMANCE CRITERIA
	output 4.6 Finishing options are set up according to job specifications
5. Perform and/or coordinate document proofing	5.1 The type of proofing method is determined according to job specifications 5.2 A digital proof run is conducted for client approval and conformance of proof to job specifications is confirmed 5.3 Internal or external pre-press proofing systems operators are consulted to conduct the proof run and provide job requirement information according to enterprise procedures 5.4 Communication between the client and proofing provider is demonstrated to ensure proof meets job specifications
6. Run digital print job and/or coordinate press print run	6.1 Production schedules, job specifications and enterprise procedures are observed and liaison occurs with internal and/or external production operators to determine start and duration time for the print run 6.2 Completion time for the print run is estimated and communicated to the client and co-workers according to job specifications and enterprise procedures 6.3 An entire digital print run is conducted according to job specifications ensuring that machine productivity and quality are monitored and rectified throughout the duration of the print job

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.4, 2.1, 4.2, 4.6, 5.1, 5.2, 6.2	- Comprehends and analyses information from a range of sources including instructions, procedures, specifications and reference material - Recognises and interprets text to establish job requirements or provide advice
Writing	1.2-1.4, 5.2-5.3, 6.2	Completes required workplace documents accurately considering context, purpose and audience when preparing texts

Oral Communication	1.2-1.4, 5.2, 5.3, 6.2	• Uses appropriate vocabulary including industry specific terms to provide explanations and information • Uses listening and questioning techniques to check and confirm understanding of requirements
Numeracy	1.1, 2.4, 6.1, 6.2	• Accurately measures and calculates quantities • Interprets and analyses mathematical information to estimate timeframes
Navigate the world of work	1.2, 1.3, 2.2, 5.3, 6.1, 6.2	• Follows organisational policies and procedures relevant to own role
Interact with others	1.2-1.4, 5.2-5.4, 6.2	• Selects and uses appropriate communication practices when providing information to clients and co-workers • Collaborates and cooperates with others to achieve joint outcomes
Get the work done	1.1, 2.1-2.4, 3.1-3.4, 4.1-4.6, 5.2, 6.3	• Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency and assembles required resources • Responds intuitively to problems in familiar contexts, quickly drawing on past experience to devise solutions • Fully utilises features of digital tools to complete complex tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN496 Set up and produce complex digital print	ICPPR496A Set up and produce complex digital print	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN496 Set up and produce complex digital print

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- communicate a range of digital and traditional printing solutions
- coordinate a print run that uses a combination of digital and traditional printing solutions
- conduct a digital proof run, adjust settings and ensure production speeds are attained on a digital printer
- perform preventive maintenance tasks on a digital printer according to manufacturer's specifications and to maintain machine productivity
- use advanced raster image processor (RIP) or front-end processor features
- identify and use information relevant to the task from a variety of information sources
- set up and print FOUR complex colour digital printing jobs according to manufacturer's specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list factors that influence decision-making about using a particular printing solution (run length, substrate type and application)
- explain cost differences between a specified job printed on a digital system and a specified traditional system, e.g. digital vs. lithographic
- discuss quality differences between a specified job printed on a digital system and a specified traditional system, e.g. digital vs. lithographic
- outline differences in turnaround time of a specified job printed on a digital system and a specified traditional system, e.g. digital vs. lithographic
- explain what print method is most appropriate for the specified print job

- discuss measures to ensure clients have the correct procedures for providing electronic files
- outline the main differences between digital printing and traditional printing methods
- describe recommendations to make to clients who have created an electronic file in an incompatible software application
- list possible suggestions to make to clients who require a high-volume print run but need a portion of the print job immediately
- outline steps for client approval of a proof
- describe circumstances in which a job would be modified before printing
- list steps involved for client approval of the print
- explain all proof checking procedures
- describe processes involved for gaining final approval of a basic job
- discuss adjusting colour, toner/ink coverage or density to solve problems
- explain the need for using correct output profiles
- discuss screen ruling shapes and sizes
- describe various types of binding
- identify advantages and disadvantages of various binding methods
- explain which procedures should be followed if the binding method required by the client is not available at the workplace
- explain alternative options if document size is too thick to staple
- discuss importance of packing finished print work.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to equipment and materials used for digital printing.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN497 Work with digital information

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to determine the scope and level of engagement with digital information needed in the job role, work with digital information effectively, solve problems with digital information, and maintain currency of own digital knowledge.

It applies to any individual working with digital information.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine requirement to work with digital information	1.1 Scope and level of requirement to work with digital information within own work role is correctly identified 1.2 Specific aspects of work tasks that require digital literacy are recognised

ELEMENT	PERFORMANCE CRITERIA
2. Engage with digital information	2.1 Digital information is used and shared responsibly according to established standards and protocols 2.2 Correct work processes are selected based on knowledge of digital work processes and general features of digital devices 2.3 Different digital formats and their associated requirements are correctly recognised and acted on
3. Solve problems with digital information	3.1 Problems with digital information are promptly identified, and possible reasons are explored 3.2 Nature of problem is identified based on knowledge of digital formats 3.3 Questions that need to be asked, and steps needed to solve the problem are correctly identified 3.4 Sources of information and assistance that could assist in resolving the problem are correctly identified 3.5 Information is accessed, correctly interpreted and used to resolve the problem
4. Maintain currency of digital knowledge	4.1 Opportunities to update knowledge about working digital information are correctly identified 4.2 Opportunities are accessed and used to improve quality of own work 4.3 Updated information is shared with others

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	3.4, 3.5	Recognises and interprets text to establish job requirements from information
Oral Communication	1.1-2.5, 3.1, 4.2	Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies
Navigate the world of work	1.1, 1.2, 2.1,	Recognises and follows explicit and implicit protocols and meets expectations associated with own role

Interact with others	4.3	Understands what to communicate, with whom and how, in routine work situations
Get the work done	2.1-2.3, 3.1-3.5	- Takes responsibility for identifying own work requirements - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Utilises information technology and software to work with digital information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN497 Work with digital information	Not applicable	New Unit	No equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN497 Work with digital information

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly identify scope and level of engagement with digital information required by the job role
- complete at least THREE different work projects involving the appropriate and correct use and manipulation of digital information as required by the job role
- follow a structured process to solve at least THREE different types of problems with digital information.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain fundamentals of digital information:
 - what it is
 - how it is created
 - the language of digital information
 - how it is shared (including basic networking principles and the cloud)
 - security considerations
 - archiving and storage requirements
- explain different levels of engaging with digital information, the scope of each level and requirements of different job roles:
 - accessing
 - using
 - understanding
 - creating

- explain general purpose and current use of different types of digital devices
- outline nature and key features of different types of digital media, including components, and opportunities and constraints of each:
 - text
 - images
 - video
 - sound
 - databases
 - multimedia
 - interactive media
 - social media
- outline different types of digital file formats, what they are used for, and how they might need to be adapted for different purposes
- outline national and international standards and protocols governing creation and use of digital information
- outline key features of being an effective digital citizen in and outside the workplace:
 - rights and responsibilities
 - ethical considerations
 - copyright
 - privacy
 - safety and risk management
- outline trends in creation and use of digital information and digital processes in context of own work role and industry sector
- describe steps in a logical and deliberate problem-solving process that can be used when working with digital information
- list sources of information and assistance when working with digital information
- discuss ways to maintain currency of knowledge around use and management of digital information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN498 Adapt digital content for publication on different devices

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to confirm digital publication end-user needs, determine technical requirements for publication on different devices (including portable devices) and manipulate digital content to suit the selected device.

It applies to skilled individuals working in any type of digital publishing role.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm end requirements	1.1 Objectives, context and key purpose of the communication are clarified with relevant people 1.2 Nature of target audience and special user-requirements are confirmed 1.3 Output format and delivery platform are confirmed based on review of job or design specifications
2. Determine	2.1 Existing format and content is reviewed for its suitability and

ELEMENT	PERFORMANCE CRITERIA
requirements for publication on different devices	compatibility with intended delivery platform 2.2 Ways people will interact with the content are considered to establish technical publication requirements 2.3 Technical requirements and constraints of output device are identified, including size and capacity issues 2.4 Information navigation and user accessibility issues are identified and reviewed 2.5 Functionality and aesthetics, and relationships between them are considered 2.6 Feasibility of publication on intended output device is confirmed based on review of requirements 2.7 Situations where content may need to be changed are recognised and acted on
3. Manipulate content to suit device	3.1 Software applications are selected based on identified requirements and job specifications 3.2 Content, formats and structures are adapted using software tools to achieve desired result, both functional and aesthetic 3.3 Technical challenges are identified and addressed through use of critical thinking and problem-solving processes
4. Finalise content	4.1 Work is reviewed and checked for accuracy, functionality and aesthetic quality at key stages 4.2 Drafts are presented to relevant people and feedback integrated into finalisation processes 4.3 Content is finalised and approved according to job requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.1, 2.3, 4.1	Recognises and interprets text to establish project parameters and technical requirements
Writing	3.2	Enters data associated with technical procedures

Navigate the world of work	1.1-1.3, 2.1-2.5, 3.3, 4.1- 4.3	Recognises and follows explicit and implicit protocols and meets expectations associated with own role
Interact with others	1.1, 1.2, 4.2, 4.3	Understands what to communicate, with whom and how, in routine work situations
Get the work done	1.1-1.3, 2.1-2.7, 3.1-3.3, 4.1-4.3	- Takes responsibility for planning and organising own workload making choices as appropriate - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Utilises a broad range of features within applications to improve personal productivity, optimising software functions for specific purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN498 Adapt digital content for publication on different devices	Not applicable	New Unit	No equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN498 Adapt digital content for publication on different devices

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- adapt at least THREE different lots of digital content for publication, on at least TWO different types of device:
 - determine appropriate technical, functional and aesthetic requirements of the job
 - correctly use features of software applications to adapt content according to requirements
 - produce work that meets all technical, functional and aesthetic requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline potential different purposes of digital communication:
 - business
 - community
 - education
 - entertainment
 - social
- outline how context of how people interact with digital communication affects its technical construction
- outline key user accessibility issues to be considered in any type of digital publication
- outline features of different output formats, why and how they are used
- outline general features and functions of different output devices / delivery platforms, including portable devices

- outline current technical requirements of different output devices, including portable devices, including limitations and opportunities
- discuss issues to be reviewed in determining whether content is suitable for publication on a particular device
- detail types of software applications and their key purpose and suitability for different types of digital publication purposes
- discuss processes and technical procedures to adapt content for publication on different types of devices
- discuss types of technical problems that arise when adapting content for different devices, and processes and problem-solving steps that can be taken to overcome them
- identify national and international standards that impact publication of digital information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- computer hardware
- current industry software packages

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN513 Set up for specialised flexographic printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up machines for specialised flexographic printing.

It applies to individuals required to set up for specialised colour jobs and who have a good knowledge of substrates and press settings.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm non-routine job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is planned and carried out correctly in minimum time, with minimum wastage 1.3 Availability of all job related components is checked 1.4 Proofed job is checked for conformance with job specifications
2. Select and prepare inks and solvents for	2.1 Inks and solvents are selected according to job specifications and end-user requirements

ELEMENT	PERFORMANCE CRITERIA
non-routine job	2.2 Quality and suitability of inks and solvents are checked and appropriate action is taken 2.3 Inks and solvents are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 2.4 Correct colour and weight/volume of ink are mixed and viscosities checked and modified according to press requirements and non-routine job specifications 2.5 Ink formula and approved colour draw downs are appropriately recorded 2.6 Inks and solvents are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions and relevant hazardous liquids storage regulations
3. Set up machine for specialised flexographic printing	3.1 Flexographic plate cylinders are installed and register adjustments centred OR 3.2 Sleeves are installed in press and register adjustments made OR 3.3 Plate mounting sheets are mounted on cylinders in press, and register adjustments made 3.4 Plate cylinders are gauged up or pre-set to impression 3.5 Anilox rollers are selected to suit individual colour and plate reproduction requirements for each unit 3.6 Appropriate ink metering system is selected for each unit 3.7 Inking system is set up and roller nips/blades are set correctly 3.8 Ink circulation is maintained at correct level 3.9 Viscosities are adjusted according to job specifications 3.10 Air volume and drier temperatures are selected to suit inks, substrate, solvents, and according to job specifications 3.11 Air volume is adjusted between colours to maximise drying and minimise air overspill
4. Conduct proof run	4.1 Material to be used for proof is organised correctly 4.2 Press is set up and operated according to WHS guidelines 4.3 Print impressions are set to minimum kiss impression 4.4 Web tensions are correctly set at unwind, between stations and rewind

ELEMENT	PERFORMANCE CRITERIA
	4.5 Print is checked for register 4.6 Drying is checked as sufficient to key ink to the substrate 4.7 Viscosities are adjusted to obtain the correct colour at proof speed
5. Organise proof inspection and/or testing	5.1 Proof is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 5.2 Production does not commence without client approval or authority where appropriate
6. Troubleshoot machinery and material problems	6.1 Corrective or preventive action is recommended and implemented where appropriate 6.2 Changes are communicated to relevant personnel in a logical and easily understood manner 6.3 Changes are monitored to confirm improvement to production efficiency

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.4, 2.1-2.4, 2.6, 3.9, 3.10	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications
Writing	2.5, 2.6, 5.2	- Completes workplace records and labels accurately and according to requirements - Considers context and audience when composing texts
Oral Communication	5.2, 6.2	Participates effectively in spoken interactions using appropriate vocabulary, questioning and listening techniques to gain approvals or provide information
Numeracy	2.4, 3.8-3.11	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	2.3, 2.6, 4.2, 5.1, 5.2	- Complies with legislative requirements and follows organisational policies and procedures relevant to own role - Recognises boundaries of own role responsibilities

Interact with others	5.2, 6.2	- Collaborates with others to complete tasks according to requirements - Follows accepted communication practices and protocols when seeking approval
Get the work done	1.2-1.4, 2.1-2.6, 3.1-3.11, 4.1-4.7, 5.1, 6.1, 6.3	- Plans, evaluates, identifies and assembles resources required to complete tasks - Determines priorities and sequences steps involved in complex tasks - Takes responsibility for addressing predictable and unpredictable problems in familiar work contexts - Evaluates effectiveness of decisions to identify opportunities for improvement - Reads data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN513 Set up for specialised flexographic printing	ICPPR513A Set up for specialised flexographic printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN513 Set up for specialised flexographic printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly set up a flexographic printing machine for a specialised job on TWO occasions using different substrates and including at least two in-line processes) according to the manufacturer's and job specifications, enterprise procedures and performance criteria
- safely conduct a proof run and adjust settings to ensure production speeds are attained
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline production problems that can eventuate if job specifications are not read and/or understood
- identify the person to discuss production problems with
- list work health and safety (WHS) factors to consider when mounting and proofing flexographic plates
- discuss the most common cause of photopolymer plates crazing on the image side
- explain the importance of printing plate resiliency
- describe the main advantage of using thin photopolymer plates in process printing
- list faults that may be found on new plates
- describe the type of solvents to use on photopolymer plates
- explain what V-block mounting is
- describe how V-block mounting is achieved
- list benefits of optical mounting
- outline the purpose of binding plates after mounting
- explain possible print faults that can be eliminated by using cushion mount

- explain any WHS factors to be considered when installing printing cylinders or sleeves
- describe precautions to ensure plates and cylinders or sleeves are not damaged during installation
- outline checks to ensure plates and cylinders or sleeves have been installed correctly
- discuss WHS precautions for webbing up the machine
- explain how to determine position of the reel
- describe how the substrate is pulled into the machine
- explain the result of insufficient unwind tension
- discuss the result of excessive unwind tension
- describe the function of the 'dancer' roller on a web machine
- explain the function of the positive input ventilation (PIV) unit
- discuss the result of adjustments to the positive input ventilation (PIV) unit
- describe the function of the lay-on roller
- discuss the effect of excessive lay-on roller pressure
- describe the effect of the web not being spliced correctly
- explain how the particular web viewing device functions
- outline WHS precautions for setting up the delivery
- explain how the web is controlled in the rewind unit
- outline the result of incorrect rewind tension
- discuss remedial steps to take if there is a possibility of the ink marking in the rewind
- explain the use of air blast play in the delivery of sheets
- discuss WHS precautions for preparing inks and additives
- outline how to determine an ink's suitability for the printing process
- explain special end-use requirements that may be necessary
- outline the main function of a pigmented extender used in flexographic printing
- describe the effect of adding plasticisers to flexographic inks
- explain why other additives are used in flexographic inks
- explain the range, in seconds, for Zahn cup measurements
- describe the effect foaming has in a Zahn cup when measuring ink viscosity
- explain the recommended pH range when printing with aqueous inks
- outline precautions to minimise waste when preparing ink
- explain the shelf life of most inks
- identify conditions relevant to storage of inks and additives
- describe conventions for labelling mixed inks
- list WHS factors to consider when setting up the machine
- explain the advantage of centring all machine controls
- list checks to make on cylinders and gears
- outline checks to perform prior to cylinder or sleeve installation
- explain the angle chamber blades should be set at
- discuss the main advantage of gauging up and dry register prior to printing a job
- discuss cell count of the anilox roller for printing solids

- outline why water treatment additives should be used in a central impression drum and chill roller coolant system
- list advantages of laser engraved ceramic anilox rollers
- describe three things relating to the anilox roller that a roller scope measures
- explain possible reasons for anilox wear
- outline the type of job that is printed using a hexagonal cell configuration
- describe the recommended web temperature when printing polypropylene film
- explain the method of drying used when printing on polythene by the flexographic process
- list factors affecting the drying rate of liquid inks
- identify factors that affect drying of aqueous inks
- explain the operating range of UV lamps
- explain why it is necessary to graduate drying speeds of each progressive colour, so that first-down colours dry faster than subsequent colours
- explain why in flexographic printing, the colour strength increases as the press speed increases
- identify possible causes of a decrease in web tension
- describe the result of increasing rewind tension after the roll has been partially rewound
- explain the major cause of a telescopic roll
- list print characteristics related to excessive printing pressure
- outline causes of picking when printing multicoloured work
- explain print faults from using an over-reduced ink
- discuss problems that can cause lateral streaks showing up in uneven printing
- describe causes of moire patterns when printing by the flexographic process
- explain what happens when air is trapped under mounted plates
- describe which instrument is used to identify retained solvent trapped in the print
- explain the purpose of taking dyne readings
- explain the purpose of the crinkle test when testing an ink
- outline the result if an excessive final drying temperature was used when printing polypropylene film
- explain what ink property can be adjusted to reduce dot gain
- discuss the effect of using the ink returning from the ink fountain when checking viscosity for ink while using ink pumps
- list problems that result from excessive use of slow solvents
- explain the effect of the 'yield value' of ink on the ink transfer of halftone dots
- discuss why laminating inks, once printed, appear dull and easy to scratch
- explain the result of excessive print area tension
- identify some of the problems associated with cold seals
- identify the location of machine manuals, safety and other documentation that are relevant to this task, where they are kept, and describe the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to a flexographic press.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN521 Set up for specialised gravure printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up for specialised gravure printing.

It applies to individuals who work outside standard job routines and who have the skills to experiment and make on-the-job adjustments to substrates and press settings.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm specialised job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Plan and carry out specialised set up	2.1 Specialised job specifications are identified and analysed 2.2 Special set up requirements are determined 2.3 Specialised set up is completed in minimum time with

ELEMENT	PERFORMANCE CRITERIA
	minimum wastage
3. Set up reels	3.1 Unwind and rewind reels are set up and adjusted according to job specifications 3.2 Webbing procedures are carried out according to job specifications 3.3 Web-control system is set up, evaluated and adjusted according to job specifications 3.4 Reels are spliced/joined according to job specifications 3.5 Printed web viewing devices are set up, evaluated and adjusted according to job specifications 3.6 Folder and sheeter are set up, evaluated and adjusted according to job specifications 3.7 Set off / marking prevention devices are set up, evaluated and adjusted according to job specifications
4. Select and prepare inks and additives	4.1 Inks, dyes or additives are evaluated with reference to specialised requirements 4.2 Inks, dyes or additives are selected according to job specifications 4.3 Inks, dyes and additives are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 4.4 Correct colour and weight/volume of ink are mixed and prepared according to job specifications and the printing process 4.5 Formulation of ink, colour match and approved colour are appropriately recorded 4.6 Inks, dyes and additives are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions to prevent damage and hazards to personnel and to prolong shelf life
5. Set up machine for specialised gravure printing	5.1 Gravure cylinders are selected, installed, set up and adjusted according to job specifications 5.2 Impression roller is set up and adjusted according to job specifications 5.3 Inking system/doctor blade is set up and adjusted according to the gravure process and job specifications 5.4 Drying system is set up and adjusted according to job specifications

ELEMENT	PERFORMANCE CRITERIA
6. Conduct specialised proof run	6.1 Material to be used for proof is organised correctly 6.2 Machine is operated according to manufacturer's specifications and enterprise procedures to produce a specified proof 6.3 Proof is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 6.4 Production does not commence without client approval or authority where appropriate 6.5 Results are interpreted and evaluated with adjustments carried out according to product and machine specifications
7. Troubleshoot machinery and material problems	7.1 Corrective or preventive action is recommended and implemented where appropriate 7.2 Changes are communicated to relevant personnel in a logical and easily understood manner 7.3 Changes are monitored to confirm improvement in production efficiency 7.4 Ongoing problems are reported according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 3.1-3.7, 4.2-4.4, 4.6, 5.2-5.4, 6.2, 6.5	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications
Writing	4.5, 4.6, 6.4, 7.2, 7.4	- Completes workplace records and labels accurately and according to requirements - Considers context and audience when composing texts
Oral Communication	6.4, 7.2, 7.4	Participates effectively in spoken interactions using appropriate vocabulary, questioning and listening to gain approvals, report problems or provide information
Numeracy	2.3, 4.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks

Navigate the world of work	4.3, 4.5, 4.6, 5.1-5.4, 6.2-6.4, 7.4	- Complies with legislative requirements and follows organisational policies and procedures relevant to own role - Recognises boundaries of own role responsibilities
Interact with others	6.4, 7.2, 7.4	- Collaborates with others to complete tasks according to requirements - Follows accepted communication practices and protocols when seeking approvals or reporting problems
Get the work done	1.2, 1.3, 2.1-2.3, 3.1-3.7, 4.1-4.4, 4.6, 5.1-5.4, 6.1-6.3, 6.5, 7.3, 7.4	- Plans, evaluates, identifies and assembles resources required to complete tasks - Determines priorities and sequences steps involved in complex tasks with a focus on production efficiency - Monitors results to determine whether requirements are met and to identify opportunities for improvement - Takes responsibility for addressing predictable and unpredictable problems in familiar work contexts - Uses familiar digital systems and tools to access, organise, analyse and display information relevant to role - Reads data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN521 Set up for specialised gravure printing	ICPPRN521C Set up for specialised gravure printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN521 Set up for specialised gravure printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely set up a gravure printing machine for a specialised job on TWO occasions using different substrates according to manufacturer's specifications, enterprise procedures and the performance criteria
- complete a proof run and adjust settings to ensure production speeds are attained
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain why it is important that job specifications are read and properly understood
- discuss production problems that could eventuate if job specifications are not read and properly understood
- identify who to discuss any production problems with
- list work health and safety (WHS) precautions for installing printing cylinders on the machine
- explain how to determine the optimum print sequence
- identify the visual aid on the cylinder that shows the colour of ink to be used
- list precautions to ensure cylinders are not damaged during installation
- discuss WHS precautions for webbing up the machine
- describe how to determine the position of the reel
- explain what happens if brake tension is not set correctly
- outline the function of the 'dancer' roller on a web machine
- explain what happens if the web is not spliced correctly
- describe how the particular web viewing device works

- explain the principle of electrostatic assist (ESA) roller operation on the gravure printing machine
- identify the type of substrate to use on the ESA roller
- list WHS precautions for setting up delivery
- explain how the web is controlled in the rewind unit
- describe the outcome of incorrect rewind tension
- describe remedial steps to take if there is a possibility of ink marking in the rewind
- list problems attributable to a blunt knife when sheeting
- explain the function of air blast play in the delivery of sheets
- list WHS precautions for preparing inks and additives
- outline details to check for an ink's suitability for the printing process
- explain why additives are used in gravure inks
- discuss the range, in seconds, for Zahn cup measurements
- describe the effect foaming has in a Zahn cup when measuring ink viscosity
- explain why pigmented ink is brought to operating temperature before correcting viscosity
- list advantages of using automatic viscosity controllers
- explain precautions to minimise waste when preparing ink
- discuss shelf life of most inks
- describe conditions relevant to storage of inks and additives
- explain conventions for labelling mixed inks
- list WHS factors for setting up the machine
- describe the function of chill rollers on a machine
- explain the main advantage of gauging up and dry register prior to printing a job
- discuss the result of excess printing pressure
- explain how to determine pressure to be applied to the doctor blade
- outline possible print faults that caused by excessive overspill of air from the inter-colour drier
- discuss the recommended air ratio for efficient inter-colour drying
- list advantages of using high-velocity air in the drying system
- explain the cause of doctor blade wear on a gravure printing unit
- outline possible options for reducing doctor blade wear
- describe how to determine optimum make ready speed for the job
- explain how to communicate steps involved in make ready to other team members
- discuss the need to grade drying speeds of each progressive colour, so that first-down colours dry faster than subsequent colours
- explain the cause of a decrease in web tension
- outline results of increasing rewind tension after the roll has been partially rewound
- discuss the major cause of a telescopic roll
- explain how to test metallised film to find out the correct side to print on
- describe how to measure the metallised surface for coating thickness
- explain the effect of annealing on aluminium foil
- discuss the purpose of using thermal imaging face stocks
- explain how substrates are metallised

- list client requirements for bar codes
- describe print characteristics related to excessive printing pressure
- explain what causes picking when printing multi-coloured work
- describe possible print faults that result from using an over-reduced ink
- list causes of moire patterns when printing by the gravure process
- describe the instrument to be used to identify retained solvent trapped in the print
- explain the purpose of taking dyne readings
- explain the purpose of the crinkle test when testing an ink
- describe print faults that result from a worn doctor blade
- discuss the effect of using ink returning from the ink fountain when checking viscosity for ink while using ink pumps
- outline problems that result from excessive use of slow solvents
- discuss why laminating inks, once printed, appear dull and easy to scratch
- describe the result of excessive print area tension
- identify problems the printer may associate with cold seals
- identify who has responsibility for the final say in the OK of the job
- identify machine manuals, safety and other documentation relevant to this task, and where they are kept and discuss the information in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to a gravure printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN531 Set up for specialised lithographic printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up for specialised lithographic printing.

It applies to individuals who can problem-solve and experiment with substrate and press settings for either wide or narrow reel- or sheet-fed lithographic printing machines for specialised print jobs.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm specialised job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Availability of all job related components is checked
2. Plan and carry out specialised set-up	2.1 Specialised job specifications are identified and analysed 2.2 Special set-up requirements are determined 2.3 Specialised set-up is completed in minimum time with minimum wastage

ELEMENT	PERFORMANCE CRITERIA
3. Set up delivery systems	3.1 Delivery systems are set up and adjusted according to job specifications 3.2 Substrate is added to and removed from process according to job specifications
4. Select and prepare inks and additives	4.1 Colour sequence for the job is considered and confirmed 4.2 Inks, dyes or additives are evaluated with reference to specialised requirements 4.3 Inks, dyes or additives are selected according to job specifications 4.4 Inks, dyes and additives are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 4.5 Correct colour and weight/volume of ink are mixed and prepared to match requirements of the printing process and job specifications 4.6 Formulation of ink, colour match and approved colour are appropriately recorded 4.7 Inks, dyes and additives are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions to prevent damage and hazards to personnel and to prolong shelf life
5. Set up machine for specialised lithographic printing	5.1 Plate cylinder is set up, evaluated and adjusted according to job specifications 5.2 Lithographic plate is selected and prepared for installation 5.3 Plates are correctly mounted safely and according to job specifications 5.4 Blanket and blanket cylinder are set up, evaluated and adjusted according to job specifications 5.5 Impression cylinder is set up, evaluated and adjusted according to job specifications 5.6 Inking system is set up, evaluated and adjusted according to the lithographic process and job specifications 5.7 Dampening system is set up, evaluated and adjusted according to job specifications 5.8 Drying system is set up, evaluated and adjusted according to job specifications
6. Conduct specialised proof run	6.1 Material to be used for proof is organised correctly 6.2 Machine is operated according to manufacturer's specifications

ELEMENT	PERFORMANCE CRITERIA
	and enterprise procedures to produce a specified proof 6.3 Specialised proof is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 6.4 Production does not commence without client approval or authority where appropriate 6.5 Results are interpreted and evaluated with adjustments carried out according to product and machine specifications
7. Troubleshoot machinery and material problems	7.1 Corrective or preventive action is recommended and implemented where appropriate 7.2 Changes are communicated to relevant personnel in a logical and easily understood manner 7.3 Changes are monitored to confirm improvement to production efficiency 7.4 Ongoing problems are reported according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 4.3-4.5, 4.7, 5.1, 5.3-5.8, 6.5,	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	4.6, 4.7, 6.4, 7.2, 7.4	- Completes workplace recording accurately - Demonstrates sophisticated control of a broad range of text types
Oral Communication	1.1, 2.1, 4.3, 4.5, 5.1, 5.3-5.8, 6.4, 7.2, 7.4	Participates effectively in spoken interactions by using strategies to confirm, clarify or repair understanding
Numeracy	4.5	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.2, 2.1, 2.3, 4.2-4.7, 5.1, 5.3-5.8, 6.2-6.5, 7.3, 7.4	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Complies with WHS, legislative requirements and

		follows organisational policies and procedures relevant to own role
Interact with others	1.1, 2.1, 5.3, 5.5, 6.1, 6.3-6.8, 7.4, 8.2, 8.4	Seeks to cooperate with others to achieve results in immediate work context
Get the work done	1.2, 1.3, 2.1-2.3, 4.1-4.5, 4.7, 5.1, 5.3-5.8, 6.1-6.3, 6.5, 7.3, 7.4	- Plans, evaluates, identifies and assembles resources required to complete tasks - Determines priorities and sequences steps involved in complex tasks with a focus on production efficiency - May use formal analytical and lateral thinking techniques to identify issues, generate and evaluate possible solutions - Is acutely aware of the importance of understanding, monitoring and controlling access to digitally stored and transmitted information - Uses familiar digital systems and tools to access, organise, analyse and display information relevant to role - Reads data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	- reel OR - sheet
Setting up and adjusting MUST include EITHER:	- set-up options for unwind and rewind reels - webbing procedures and web control system - splicing/joining reels - printed web viewing devices - folder and sheeter - set off / marking prevention devices OR - feeder and delivery sections - sheet pick-up, transportation, control and transfer systems

	• set off / marking prevention devices

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN531 Set up for specialised lithographic printing	ICPPR531C Set up for specialised lithographic printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN531 Set up for specialised lithographic printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up either wide or narrow reel or sheet-fed lithographic printing machines for specialised print jobs; conduct a proof run and adjust settings to ensure production speeds are attained in minimum time with minimum wastage
- set up a lithographic printing machine for a specialised job on TWO occasions using different substrates and sheet sizes if sheet-fed and including at least two in-line processes according to manufacturer's and job specifications, enterprise procedures and the performance criteria.
- find and use information relevant to the task from a variety of information sources

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain why it is necessary that job specifications are read and properly understood
- discuss production problems that could eventuate if job specifications are not read and properly understood
- identify who to discuss any production problems with
- outline the problem that can result from the plate cylinder not being cleaned prior to plate fitting
- describe what happens if the plate is over tensioned during fitting
- list faults that can result from a plate being under tensioned

For reel systems only

- describe the need for accurate plate bending on a web-fed machine

- explain how to determine position of the reel
- describe the effect if brake tension is not set correctly
- discuss the function of the ‘dancer’ roller on a web machine
- outline how to determine position of the bustle wheels
- explain what happens if the web is not spliced correctly
- describe the operation of the particular web viewing device
- explain how the web is controlled in the rewind unit
- outline the function of a slitter on a web machine
- discuss what causes the web to jam up in the folder
- explain the need to disengage the folder if sheeting
- list problems that attributable to a blunt knife when sheeting
- outline the safety feature in the delivery system for when the web jams up
- describe which fold is always made with the grain of the web
- explain the type of folder that folds the web in half in the direction of the web grain
- outline remedial steps to take if there is a possibility of ink marking in the folder
- describe the main reason for having a silicone applicator on a web machine
- explain the main reason for blistering on a heat set machine
- explain what the oven evaporates from the ink
- discuss the function of chill rollers on a web machine

For sheet systems only

- describe work health and safety (WHS) factors to consider when setting up the sheet transportation and delivery systems
- explain what causes more than one sheet to be picked up in the feeder
- discuss the need for accurate feeder set up
- describe how to determine position of the sheet prior to transfer to the printing unit
- discuss how to determine which front lays to use
- explain the type of substrate that requires additional front lays to be engaged
- explain the need for additional front lays when printing this type of substrate
- list the WHS precaution to observe when setting up the delivery
- list WHS precautions for removing sheets from the delivery
- explain what causes incorrect sheets delivery
- outline necessary adjustments when changing from lightweight to heavyweight stocks
- explain what determines sheet release into the delivery
- list problems caused by excessive use of anti-set off spray powder
- describe what might cause printed sheets to set off in the delivery
- discuss how the possibility of set off in the delivery might be reduced
- explain what can happen if there is excess vacuum on the slow-down wheels
- list WHS precautions that must be observed when preparing inks and additives
- describe the procedure used to lengthen print length on this type of press
- discuss the procedure used to shorten print length on this type of press

- outline considerations of deciding colour sequence
- point out the visual aid on the plate that identifies ink colour to be used
- discuss all WHS precautions for webbing up the machine
- outline details to check to determine an ink's suitability for the printing process
- describe what special end-use requirements might be necessary
- explain the reason for mixing additives in the ink
- explain how a spectrophotometer can help assess ink colour
- describe the formula for calculating correct quantity of lithographic ink
- discuss the print fault that occurs if excessive driers are mixed into the ink
- outline precautions to minimise waste when preparing ink
- explain shelf life of most inks
- discuss conditions relevant to storage of inks and additives
- explain conventions for labelling mixed inks
- list WHS factors for setting up the machine
- describe checks made on the plate prior to fitting
- explain how much plate packing is required
- describe normal printing pressure required between plate and blanket
- explain how to determine correct printing pressure between blanket and stock
- explain the ideal blanket surface condition
- describe how to achieve correct blanket tension when fitting a new blanket
- describe print faults likely if the impression cylinder is not maintained
- explain the order eccentric or concentric roller adjustments should be made in
- explain what the width of the contact stripe between two rollers should be when setting the rollers
- describe how to determine the ink duct setting
- explain the ideal ink duct sweep setting
- discuss recommended degrees shore hardness for bare back and conventional dampeners
- describe what conductivity of the fountain solution should be
- explain why it is important to constantly check conductivity of the fountain solution
- explain how to change the amount of fountain solution across the plate surface
- outline the need to adjust the fountain solution laterally
- list reasons it might be difficult to engage the perfecting unit
- list types of ink drying/curing systems
- describe what the true inch function feature fitted to some machines does
- list what may cause the machine to keep stopping
- outline necessary checks prior to engaging the impression
- describe checks performed when running the machine
- describe the effect position of certain guards has on operation of the machine
- explain how steps involved in operating the machine should be communicated to other team members
- describe aids available for the testing of the machine proof
- discuss where testing should take place

- explain the function of a polarisation filter in a densitometer
- describe ideal conditions for inspecting the proof
- discuss why it is necessary to use visual aids on the printed sheets
- describe the acceptable wet trap value range for lithographic inks
- outline an indication of optimum solid ink density in the absence of a proof
- explain the result of low solid ink density and excessive dot gain
- describe available methods to check and adjust ink colour and consistency
- list adjustments that may cause mis-register
- list adjustments made to position the image laterally
- list adjustments made to position the image circumferentially
- list adjustments made to position the image diagonally
- discuss the effect of changing colour sequence on the wet trap value
- explain the difference between mechanical and optical dot gain
- outline the cause of excessive mechanical dot gain
- explain who has responsibility for the final say in the OK of the job
- identify machine manuals, safety and other documentation relevant to this task, where they are kept, and discuss information included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to a lithographic printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN541 Set up for specialised pad printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up for specialised pad printing.

It applies to individuals who set up pad printing machines for multi-coloured or specialised print jobs, which usually require problem-solving and experimentation with the substrate and press settings.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm specialised job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Availability of all job related components is checked
2. Plan and carry out specialised set-up	2.1 Specialised job specifications are identified and analysed 2.2 Specialised set-up requirements are determined 2.3 Specialised set-up is completed in minimum time with minimum wastage 2.4 Appropriate tampons are selected according to job

ELEMENT	PERFORMANCE CRITERIA
	specifications 2.5 Tampons are secured into machine
3. Conduct specialised set-up of fixtures onto machine bed or conveyor	3.1 Appropriate fixtures are selected and secured to xy table or conveyor jig plates 3.2 Height of machine bed is adjusted to suit size of object to be printed 3.3 Xy table of machine bed is adjusted to suit position of image on object
4. Select and prepare inks and additives	4.1 Inks and additives are evaluated according to job specifications 4.2 Inks and additives are selected according to job specifications 4.3 Inks and additives are prepared according to work health and safety (WHS) requirements and manufacturer's/supplier's instructions with suitable precautions to minimise waste 4.4 Correct colour and weight/volume of ink are mixed and prepared according to requirements of the printing process and job specifications 4.5 Formulation of ink, colour match and approved colour are appropriately recorded 4.6 Inks and additives are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions to prevent damage and hazards to personnel and to prolong shelf life
5. Set up machine for specialised pad printing	5.1 Plate holders are set up and adjusted for register according to job specifications 5.2 Appropriate plates and plate holders are selected and plates are secured into plate holders 5.3 Tampons are set up, evaluated and adjusted according to job specifications 5.4 Spatula and doctor blade are set up, evaluated and adjusted according to requirements of the pad printing process and job specifications OR 5.5 Ink cups are set up, evaluated and adjusted according to job specifications
6. Set up pre- and post-treatment processes	6.1 In-line loading is set up according to specialised object requirements and job specifications 6.2 In-line drying is set up according to specialised object

ELEMENT	PERFORMANCE CRITERIA
	requirements and job specifications 6.3 In-line ejection is set up according to specialised object requirements and job specifications
7. Conduct specialised proof run	7.1 Material to be used for proof is organised correctly 7.2 Machine is operated according to manufacturer's specifications and enterprise procedures to produce a specified proof 7.3 Proof is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 7.4 Production does not commence without client approval or authority where appropriate 7.5 Results are interpreted and evaluated with adjustments carried out according to product and machine specifications
8. Troubleshoot machinery and material problems	8.1 Corrective or preventive action is recommended and implemented where appropriate 8.2 Changes are communicated to relevant personnel in a logical and easily understood manner 8.3 Changes are monitored to confirm improvement to production efficiency 8.4 Ongoing problems are reported according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 2.4, 4.1-4.3, 4.6, 5.1, 5.3-5.5, 6.1-6.3, 7.2, 7.5	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specialised specifications
Writing	4.5, 4.6, 7.4, 8.2, 8.4	- Completes workplace records and labels accurately and according to requirements - Considers context and audience when composing texts
Oral	7.4, 8.2, 8.4	Participates effectively in spoken interactions using appropriate vocabulary, questioning and listening

Communication		techniques to gain approvals, report problems or provide information
Numeracy	2.3, 4.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	4.3, 4.5, 4.6, 7.2-7.4, 8.4	- Complies with legislative requirements and follows organisational policies and procedures relevant to own role - Recognises boundaries of own role responsibilities
Interact with others	7.4, 8.2, 8.4	- Collaborates with others to complete tasks according to requirements - Follows accepted communication practices and protocols when seeking approvals or reporting problems
Get the work done	1.2, 2.2-2.5, 3.1-3.3, 4.1-4.3, 4.6, 5.1-5.5, 6.1-6.3, 7.1-7.3, 7.5, 8.1, 8.3	- Plans, evaluates, identifies and assembles resources required to complete tasks - Determines priorities and sequences steps involved in complex tasks with a focus on production efficiency - Monitors results to determine whether requirements are met and identify opportunities for improvement - Takes responsibility for addressing predictable and unpredictable problems in familiar work contexts - Uses familiar digital systems and tools to access, organise, analyse and display information relevant to role - Reads data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN541 Set up for specialised pad printing	ICPPR541C Set up for specialised pad printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN541 Set up for specialised pad printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely set up a machine for specialised pad printing on TWO occasions, on different substrates, to meet manufacturer's and job specifications, enterprise procedures and the performance criteria
- set up manual pre- and post-treatment processes and conduct a proof run including adjusting settings to ensure production speeds are attained
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify FOUR different substrate groups and suggest correct ink type for each group
- explain THREE possible sub-groups of plastic in relation to ink selection
- explain how to adjust process colour inks for correct colour balance
- describe TWO methods of improving opacity of a light coloured ink on a dark substrate
- outline how to determine correct pad shape for the FOUR applications
- explain the effect that pad shape and hardness have on print quality
- describe the effect commonly seen at the contact point of the nipple of a pad in a large solid print and how can it be avoided
- outline how to prepare a new pad before its first printing
- describe the correct plate type for these (given) applications
- explain the difference between steel and photopolymer plates for process printing
- discuss reasons for mis-registered images, and how they can be corrected
- list work health and safety (WHS) concerns of setting presses and doctor blades
- discuss possible machine adjustments so the doctor blade operates correctly

- describe the effect of a damaged doctor blade
- list various types of doctor blades and explain their applications
- list WHS concerns when using pre- and post-treating substrates
- outline common pre- and post-treatment methods for different substrates
- explain the importance of pre- and post-treatments for different substrates
- list causes and solutions for SIX common print problems (eg hairlines around image, loss of density in the centre of a solid image, fine lines of ink running through image, distortion of image, picking up ink from substrate by subsequent pads, washed out images, loss of fine lines in images, inconsistent colour)
- identify where machine manuals, safety and other documentation relevant to this task are kept, and describe the information in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to special purpose tools, equipment and materials, including a pad printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN551 Set up for specialised relief printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up for specialised relief printing.

It applies to individuals who can problem-solve and experiment with substrate and press settings when operating reel- or sheet-fed plate, cylinder or rotary printing machines for specialised print jobs.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm specialised job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Availability of all job related components is checked
2. Plan and carry out specialised set-up	2.1 Specialised job specifications are identified and analysed 2.2 Specialised set-up requirements are determined 2.3 Specialised set-up is completed in minimum time with minimum wastage

ELEMENT	PERFORMANCE CRITERIA
3. Set up delivery systems	3.1 Delivery systems are set up, evaluated and adjusted according to job specifications 3.2 Substrate is added to and removed from process according to job specifications
4. Evaluate, select and prepare inks and additives	4.1 Inks, dyes or additives are evaluated according to end-user requirements and job specifications 4.2 Inks, dyes and additives are selected according to end-user requirements and job specifications 4.3 Inks, dyes and additives are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 4.4 Correct colour and weight/volume of ink are mixed and prepared according to requirements of the printing process and job specifications 4.5 Formulation of ink, colour match and approved colour are appropriately recorded 4.6 Inks, dyes and additives are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions to prevent damage and hazards to personnel and to prolong shelf life
5. Set up machine for specialised relief printing	5.1 Appropriate relief plates are selected and secured to the machine 5.2 Relief polymer plates/forme are set up and adjusted according to job specifications (platen) 5.3 Relief polymer cylinders are set up and adjusted according to job specifications (platen) 5.4 Impression is set up and adjusted according to job specifications (platen and rotary) 5.5 Inking system is set up and adjusted according to requirements of the relief process and job specifications (platen and rotary) 5.6 Drying system is set up and adjusted according to job specifications
6. Conduct specialised proof run	6.1 Material to be used for specialised proof is organised correctly 6.2 Machine is operated according to manufacturer's specifications and enterprise procedures to produce a specialised proof 6.3 Specialised proof is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 6.4 Production does not commence without client approval or

ELEMENT	PERFORMANCE CRITERIA
	authority where appropriate 6.5 Results are interpreted and adjustments are carried out according to product and machine specifications
7. Troubleshoot machinery and material problems	7.1 Corrective or preventive action is recommended and implemented where appropriate 7.2 Changes are communicated to relevant personnel in a logical and easily understood manner 7.3 Changes are monitored to confirm improvement to production efficiency 7.4 Ongoing problems are reported according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 4.1-4.4, 4.6, 5.2-5.6, 6.2, 6.5	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications
Writing	4.5, 4.6, 6.4, 7.2, 7.4	- Completes workplace records and labels accurately and according to requirements - Considers context and audience when composing texts
Oral Communication	6.4, 7.2, 7.4	Participates effectively in spoken interactions using appropriate vocabulary, questioning and listening techniques to gain approvals, report problems or provide information
Numeracy	2.3, 4.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	4.3, 4.5, 4.6, 6.2-6.4, 7.4	- Complies with legislative requirements and follows organisational policies and procedures relevant to own role - Recognises boundaries of own role and responsibilities
Interact with others	6.4, 7.2, 7.4	Complies with legislative requirements and follows organisational policies and procedures relevant to own role

Get the work done	1.2, 2.2, 2.3, 4.3, 4.4, 4.6, 5.1-5.6, 6.1-6.5, 7.1-7.4	• Recognises boundaries of own role and responsibilities • Plans, evaluates, identifies and assembles resources required to complete tasks • Determines priorities and sequences steps involved in complex tasks • Monitors results to determine whether requirements are met and to identify opportunities for improvement • Takes responsibility for addressing predictable and unpredictable problems in familiar work contexts • Uses familiar digital systems and tools to access, organise, analyse and display information relevant to role • Reads data from electronic monitoring and control systems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• reel OR • sheet
Setting up, evaluating and adjusting MUST include EITHER:	• unwind and rewind reels • webbing procedure and web control systems • splicing/joining reels • print web viewing devices • folders and sheeters • set off / marking prevention devices OR • feeder and delivery sections • sheet pick-up and transportation system • transfer and control system • set off / marking prevention devices

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN551 Set up for specialised relief printing	ICPPR551C Set up for specialised relief printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN551 Set up for specialised relief printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely set up a relief printing machine for specialised printing on TWO occasions, using different substrates and including at least two in-line processes, according to manufacturer's and job specifications, enterprise procedures and the performance criteria
- set up reel- or sheet-fed platen, cylinder or rotary printing machines for specialised print jobs including conducting a proof run and adjusting settings to ensure production speeds are attained
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain why it is important that job specifications are read and properly understood
- discuss production problems that might occur if job specifications are not read and properly understood
- name the person to discuss any production problems with
- outline the importance of printing plate hardness
- list faults that may be detected on new plates
- identify type of solvents used on photopolymer plates
- define V-block mounting
- explain how V-block mounting is achieved
- discuss the purpose of binding plates after mounting
- list checks to perform prior to cylinder installation
- explain precautions to ensure plate/cylinders are not damaged during installation
- list WHS precautions for preparing inks and additives

- list details to check for an ink's suitability for the printing process
- describe any special end-use requirements that may be necessary
- discuss additives and their use in inks
- explain the use of a spectrophotometer to assess colour of an ink
- outline the formula for calculating correct quantity of lithographic ink
- describe the print fault likely if excessive driers are mixed into the ink
- identify precautions to minimise waste when preparing the ink
- explain shelf life of most inks
- discuss conditions relevant to storage of inks and additives
- describe conventions for labelling mixed inks
- list major WHS concerns of setting up the machine
- list the order eccentric or concentric roller adjustments should be made in
- discuss the width of the contact stripe between two rollers when setting rollers
- discuss how to determine the ink duct setting
- explain the ideal ink duct sweep setting
- outline recommended degrees shore hardness for forme rollers
- name various types of ink drying/curing systems
- explain the operation of the true inch function fitted to some machines
- identify problems that may cause the machine to keep stopping
- list necessary checks prior to engaging the impression
- outline checks performed when running the machine
- describe the effect of the position of certain guards on the operation of the machine
- explain importance of communicating steps involved in operating the machine to other team members
- identify aids available for testing the machine proof
- explain what tests are necessary for an individual job
- identify where testing should take place
- describe the function of a polarisation filter in a densitometer
- explain ideal conditions for inspecting the proof
- explain the cause of a halo effect on the image
- identify methods available to check and adjust ink colour and consistency
- discuss adjustments that may cause mis-register
- outline adjustments made to position the image laterally
- outline adjustments made to position the image circumferentially
- describe the effect of changing the colour sequence on the final colour cast
- explain the difference between mechanical and optical dot gain
- explain the cause of excessive mechanical dot gain
- name who has responsibility for the final say in the OK of the job
- discuss in-line processes used in specialised pad printing
- identify machine manuals, safety and other documentation relevant to this task and where they are kept, and describe the information in them.

For reel systems only

- describe how to determine position of the reel
- discuss what happens if brake tension is not set correctly
- explain the function of the 'dancer' roller on a web machine
- outline the function of nip rollers
- discuss what happens if the web is not spliced correctly
- explain how the web is controlled in the rewind unit
- outline the function of a slitter on a web machine
- list problems attributable to a blunt knife when sheeting
- list the main reason for blistering on a heatset machine
- explain how the drying unit cures the ink

For sheet systems only

- list the major work health and safety (WHS) concerns of setting up the sheet transportation system
- explain the cause of more than one sheet being picked up in the feeder
- explain why accurate feeder set up is essential
- describe what determines position of the sheet prior to being transferred to the printing unit
- outline how to determine which front lays to use
- identify the type of substrate that requires additional front lays to be engaged
- explain the need for additional front lays when printing this type of substrate
- identify the most important WHS precaution to observe when setting up the delivery
- List WHS precautions for removing sheets from the delivery
- explain the cause of sheets being delivered incorrectly
- outline necessary adjustments if changing from lightweight to heavyweight stocks
- explain what determines sheet release into the delivery
- identify problems from excessive use of anti-set off spray powder
- explain what causes printed sheets to set off in the delivery
- describe how to reduce the possibility of set off in the delivery
- explain how air blast can assist sheet delivery
- explain how much packing is required in the tympan
- explain how the level of printing pressure is determined
- explain the ideal condition of the tympan
- discuss how to achieve the correct top sheet tension when fitting a new tympan
- identify print faults that can occur if the tympan is not tensioned correctly
- discuss the need to use visual aids on the printed sheets
- explain the procedure to lengthen print length on this type of press
- explain the procedure to shorten print length on this type of press
- explain the importance of keeping machine frames and unit slides clean
- list WHS precautions for installing printing cylinders in the machine

- explain how to determine the optimum print sequence
- point out the visual aid on the plate that identifies the colour of ink to be used
- list WHS precautions for webbing up the machine
- discuss remedial steps to take if there is a possibility of the ink marking in the rewind sheet delivery system on a sheet-fed machine

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to a reel- or sheet-fed platen, cylinder or rotary printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRN552 Manage digital workflow

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manage digital workflow from concept stage to completion and delivery of a final product for publication. The final product may be paper based or electronic.

This unit applies to individuals responsible for managing and optimising a digital workflow in a range of commercial environments.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine job resource requirements	1.1 Job requirements are correctly interpreted from client brief or job information 1.2 Scope of required human, financial and physical resources is identified based on job information 1.3 Costs are estimated according to chosen pricing models and estimating practices 1.4 Budget plans are established and checked against estimations

ELEMENT	PERFORMANCE CRITERIA
	to deliver accurate, documented costing 1.5 Scheduling and time management is integrated into project planning and monitoring 1.6 Human resources are incorporated within project framework 1.7 Business transactions are undertaken ethically and according to law
2. Plan digital production workflow	2.1 Workflow stages are identified to determine sequencing 2.2 Workflow is sequenced for optimum production efficiency and job quality 2.3 Technical processes and protocols are integrated into the workflow 2.4 Need for new sequences is evaluated according to job requirements and feasibility tests 2.5 Evaluation mechanisms are incorporated at key stages of work 2.6 Workflow is documented according to project needs and enterprise requirements
3. Monitor workflow and resources	3.1 Work processes and progress are monitored against plans 3.2 Colleagues are assisted to achieve outcomes with technical and other support 3.3 Actual job costs are documented and monitored against budgets, and variations are communicated to appropriate people 3.4 Need for variations is identified and adjustments made as required
4. Finalise job	4.1 Job is completed with required outcome achieved within designated timeframes and costs 4.2 Estimated and actual costs are reviewed and used to inform future planning 4.3 Efficiency and quality of outcomes are evaluated and findings incorporated for future planning

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.4	Comprehends and analyses information from a range of sources to establish scheduling requirements
Writing	1.4, 2.6, 3.3	Drafts, develops and documents plans and work documents using appropriate formats
Numeracy	1.3, 1.4, 1.7, 2.2, 3.1, 3.2, 4.2	- Performs calculations needed to create and manage schedules and budgets - Compares estimated against actual costs
Navigate the world of work	1.3, 1.4, 1.7	Understands and complies with legislative and ethical requirements
Interact with others	3.3	Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective group interaction
Get the work done	1.1-1.6, 2.1-2.5, 3.1-3.3, 4.1-4.3	- Develops plans to manage relatively complex tasks with an awareness of how they contribute to broader goals - Monitors and evaluates results against stated goals, adjusting plans where necessary - Systematically gathers and analyses all relevant information and evaluates options to make decisions about production processes - Identifies and addresses problems that may impact on successful adoption of production processes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN552 Manage digital workflow	ICPPR552A Manage digital production workflow	Updated to meet Standards for Training Packages Content re-ordered and re-worked for clarity Renamed to reflect	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
		industry practice	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRN552 Manage digital workflow

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- manage digital production workflow for at least THREE different publications, including print and electronic:
 - determine required level of resource from client requirements
 - accurately cost the work
 - complete workflow planning
 - monitor workflow
 - manage resources
 - finalise jobs with required outcome and within required timeframe and budget.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain key considerations for management of a digital workflow process:
 - project planning and scheduling requirements
 - costing and resources issues
 - communication and approvals processes
 - work sequencing
 - work monitoring processes
 - content management
 - file management – naming, storage, saving, archiving
 - editing processes
 - distribution

- outline costing/estimating methods for digital work
- identify elements that can be adjusted in estimations if they consistently do not match costs
- identify work health and safety (WHS) concerns to consider when planning production
- describe key aspects of monitoring workflow and resources:
 - what needs to be monitored to maintain standards
 - who is involved in monitoring
 - role of keeping accurate production records
 - review of production records and actual costs
- outline common causes of failure in each area of work monitored, and procedures to minimise the effects of these
- discuss processes to make improvements that impact quality standards
- outline evaluation and review processes for digital work
- describe features of computerised production monitoring systems used to accurately assess costs.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to relevant facilities, equipment and materials used for digital publication.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP211 Develop a basic design concept

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce a basic graphic design concept for a client, from assessment of the brief, to production of roughs and finished art.

It applies to individuals who work under direct supervision and in consultation with others to design and prepare layouts, artwork and manipulate images and texts to meet work and production requirements.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Assess brief requirements	1.1 Printing requirements of layout brief are determined to align pre-press processes with printing feasibility 1.2 Brief is broken down into stages of production to determine a plan 1.3 A plan of action is designed to meet time requirements of each stage so deadlines are identified and adhered to 1.4 Correct industry-standard terms of design and typography are

ELEMENT	PERFORMANCE CRITERIA
	used to facilitate communication
2 Assemble layout	2.1 Client copy and images are assembled according to brief requirements 2.2 Library files are accessed for relevant data to conform to brief requirements 2.3 Appropriate equipment and materials to complete the layout are assembled so brief is undertaken efficiently 2.4 Design area is cleaned and prepared, ready for use
3 Render simple graphic design	3.1 Client requirements are checked to ensure design concept matches the brief 3.2 Preliminary graphic design ideas are constructed according to the brief 3.3 Simple graphic design concept is rendered electronically to conform to client brief 3.4 Rendered graphic design is checked for conformance with client brief
4 Produce finished artwork	4.1 Layout grid is created to meet client brief specifications 4.2 Type is selected for readability and style, and fitted into grid space allocated to conform to client brief 4.3 Photographs and illustrations are selected, scaled and cropped appropriately to fit allocated grid space 4.4 Overlays/colour roughs are created to conform to brief specifications 4.5 Components of layout are positioned accurately using keylines to conform to grid framework
5 Check for suitability	5.1 Layout is checked to eliminate omissions and errors 5.2 Layout design is checked against brief requirements to conform to critical requirements of proposed medium 5.3 Layout is rendered ready to present to client
6 Tidy materials and store data	6.1 Equipment and materials are returned to storage according to enterprise procedures 6.2 Design data and materials are saved and/or filed ready for future retrieval according to enterprise procedures 6.3 Design area is cleaned according to enterprise procedures ready for reuse

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1, 3.4, 4.4, 5.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	1.2, 1.3, 3.2	Produces documents using headings, instructions and layout that meet needs of audience and purpose of text
Oral Communication	1.4, 3.1	Uses appropriate vocabulary, including technical language relevant to role and context
Navigate the world of work	1.1, 1.4, 2.4, 6.1-6.3	Recognises and follows organisational and legislative requirements associated with own role
Interact with others	1.4, 3.1	Uses appropriate communication protocols and conventions to confirm or clarify client requirements
Get the work done	1.1-1.4, 2.1-2.3, 3.2-3.4, 4.1-4.5, 5.1-5.3, 6.1-6.3	- Organises and prioritises work and personal commitments, with some sense of what is achievable in a timeframe - Plans, identifies and assembles resources required to complete tasks - Takes responsibility for routine decisions related directly to own role - Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to design and save files in required format

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP211 Develop a basic design concept	ICPPP211C Develop a basic design concept	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP211 Develop a basic design concept

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly prepare TWO sets of colour roughs and artwork containing line and tone work according to specifications of client brief, ensuring rendered design meets design brief requirements, conforms to commercial design standards, and meets reproduction final use requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify purpose of artwork being prepared
- identify number and specific colours of the job
- name scale of artwork to finished job
- explain difference between reflective and transparent originals
- name three essential elements to consider when preparing art for printing/publication
- outline different requirements for TWO printing or electronic output processes
- outline types of halftone dot structures and maximum and minimum tonal ranges that could be used to reproduce this artwork
- outline work health and safety (WHS) requirements when using cameras or computers
- name colour sequence and overlap for transparent/opaque colours
- explain affect (influence) of selection of different typefaces
- describe method used for registration and trim marks
- evaluate artwork for density, definition and resolution, and explain how can this be corrected
- name characteristics of properly prepared line artwork

- identify location of manuals, safety and other documentation that are relevant to this task and information that is included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP221 Select and apply type

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake basic typesetting tasks, including selecting required fonts, fitting, and proofing final type.

It applies to individuals in the printing and graphic art industry. Typically they design and prepare layouts and artwork, and manipulate images and texts to meet production requirements. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Identify fonts	1.1 A range of fonts is identified to meet diverse client requirements and final output media 1.2 Point sizes and leading of type are identified to meet diverse client requirements and final output media
2 Select, fit and produce type for a basic brief	2.1 Appropriate type is selected to meet brief specifications 2.2 Type is fitted into copy space allocated according to design layout

ELEMENT	PERFORMANCE CRITERIA
	2.3 Type is set and produced using rules and boxes according to design layout
3 Proofread and correct type	3.1 Type is checked for accuracy, omissions and errors according to job specifications 3.2 Proofs are marked-up with correct proofreading marks 3.3 Type is corrected in accordance with job specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 2.2, 3.1, 3.3	- Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications - Proofreads documents to ensure accuracy and consistency of information and clarity of meaning
Writing	3.2	Uses a variety of strategies for planning, drafting, reviewing and proofreading
Numeracy	1.2, 2.2	Selects and uses appropriate familiar mathematical problem-solving strategies to solve problems in familiar contexts
Get the work done	1.1, 1.2, 2.1-2.3, 3.1-3.3	- Determines job priorities, resources and equipment, and works logically and systematically to undertake clearly defined and familiar tasks - Automatically implements standard procedures for routine decisions in response to familiar problems - Uses digital systems and tools and operates them effectively to design and apply type

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP221 Select and apply type	ICPPP221C Select and apply type	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP221 Select and apply type

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly prepare TWO different typesetting jobs using manual or electronic equipment and suitable software to select, set, arrange and modify type according to job specifications and listed performance criteria
- find and use information relevant to task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify different printing processes and/or electronic media and explain effects of each on type selection and design
- define aspects of typography that influence design of the brief
- outline limitations with type reproduction in printing processes
- explain characteristics of and differences between serif and sans serif categories
- explain type atmosphere
- identify elements of a dynamic arrangement
- identify and explain text and margin proof-reader marks
- identify and use correct grammar and punctuation, including apostrophes
- list manuals, safety and other documentation relevant to this task and identify where are they kept and what information is included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, industry software packages, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP223 Photograph a line image

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake graphic arts camera work, including preparing a camera and equipment to photograph a line image that meets design and production quality standards.

It applies to individuals who design and prepare layouts and artwork, and manipulate images and texts to meet production requirements, and who generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare camera	1.1 Camera is prepared to ensure appropriate size and focus for the job 1.2 Correct exposure for line reproduction is established according to manufacturer's specifications
2 Prepare and operate processor	2.1 Processor is prepared to ensure correct chemical balance, temperature and maintenance 2.2 Processor is operated in line with established procedures

ELEMENT	PERFORMANCE CRITERIA
3 Operate camera	3.1 Appropriate photographic material and processing chemical combination is selected for line image 3.2 Line images are photographed using correct camera settings 3.3 Quality of photographic output is evaluated to ensure suitability for design purpose and final media or reproduction process

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Get the work done	1.1, 2.1, 2.2, 3-1-3.3	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles resources required - Applies analytical processes to resolve technical problems - Initiates standard procedures when responding to familiar problems within immediate context

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP223 Photograph a line image	ICPPP223C Photograph a line image	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP223 Photograph a line image

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare, set up and use a graphic arts camera to photograph and process TWO different line originals according to listed performance criteria
- evaluate quality of photographic output to ensure suitability for design purpose and final media or reproduction process
- ensure underlying quality of photographic images is transferable across different camera designs and processing systems; identifying the substrate for reproduction, and quality of photographic image, is suitable for the identified printing process
- demonstrate an ability to find and use task relevant information from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe effect of different printing processes on line images
- perform enlargement factor calculation
- identify base exposure data
- identify factors that cause base exposure to change
- correctly process an image
- identify factors that control quality of output through the processor
- explain copy characteristics that require a change to base exposure
- explain relationship between magnification and exposure
- list characteristics of a correctly exposed line negative
- outline image requirements for various printing processes
- list work health and safety (WHS) requirement for operating a processor

- explain how to maintain consistent output from the processor
- list manuals, safety and other documentation relevant to this task and identify where are they kept and what information is included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP224 Produce pages using a page layout application

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to compose pages based on a client brief using a high-end application, and covers how to arrange basic elements on a page, finalise artwork and check quality.

It applies to individuals in the printing and graphic art industry who design and prepare layouts and artwork, and manipulate images and texts to meet production requirements. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Arrange elements on page	1.1 Client copy and images are assembled to conform to design brief 1.2 Text is prepared and required fonts and font sizes are used 1.3 Basic elements are created and arranged on page to conform to design brief 1.4 Elements are copied and pasted according to design brief 1.5 'Help' function is accessed if required and solution to queries

ELEMENT	PERFORMANCE CRITERIA
	found 1.6 Document set-up is completed to conform to design brief
2 Finalise artwork	2.1 Pages and combined elements are composed correctly to suit specified page size 2.2 Margins and borders incorporate a bleed allowance
3 Check quality	3.1 Text is reviewed for possible errors and omissions, and errors are discussed with client or supervisor 3.2 Basic elements are arranged maintaining overall layout balance and correct tonal quality 3.3 Hardcopy proof is printed and rechecked for errors, omissions and overall layout balance 3.4 Trim marks and margins are correctly placed 3.5 Necessary changes are made and reviewed on screen and re-proofed as required 3.6 Job is saved according to enterprise procedures 3.7 Proof or PDF is created to present to client

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.6, 3.1, 3.3, 3.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	1.2	Gathers information from range of sources to record using headings, instructions and layout that meet audience needs and text purpose
Oral Communication	3.1	Uses appropriate vocabulary, including technical language relevant to role and context
Numeracy	1.3, 2.1, 2.2, 3.4	Selects and uses appropriate familiar mathematical problem-solving strategies to solve problems in familiar contexts

Navigate the world of work	3.6	Recognises and follows organisational and legislative requirements associated with own role
Interact with others	3.1	Uses appropriate communication protocols and conventions to confirm or clarify client requirements
Get the work done	1.1-1.5, 2.1, 2.2, 3.1-3.4, 3.7	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Applies analytical processes to resolve problems - Initiates standard procedures when responding to familiar problems within immediate context - Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to create and save files in required format

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP224 Produce pages using a page layout application	ICPPP224C Produce pages using a page layout application	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP224 Produce pages using a page layout application

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare TWO different sets of page layouts according to a client's design brief and the listed performance criteria
- demonstrate ability to find and use information relevant to task from a variety of information sources
- demonstrate ability to communicate ideas and information, and clarify information with client or supervisor.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline consideration given to the printing process during design phase
- identify problems that can occur if printing process isn't considered during design stage
- define substrate size consideration during imposition
- outline how planning occurs for multiple colours and graphics during imposition
- describe considerations given to ensuring own health and safety when using a keyboard
- discuss importance of saving documents in particular areas of a computer or network
- outline how to find a document on a computer or network
- list steps involved in changing and saving templates
- explain value of style guides and style sheets.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to:

- special purpose tools, equipment and materials
- industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP225 Produce graphics using a graphics application

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to develop computer-generated graphics based on a client brief, using a high-end application; and focuses on techniques required to create and manipulate visual objects on a page.

It applies to individuals who assist in the production of professionally designed and presented print and electronic media using desktop publishing software. They generally work under direct supervision with some responsibility for the production process and ensuring output meets the requirements of the design brief.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare work environment	1.1 Details of brief are reviewed to identify preference setting requirements 1.2 Monitor is calibrated using an International Colour Consortium (ICC) profile to ensure closest possible colour match 1.3 Palettes are arranged to suit job and personal preferences

ELEMENT	PERFORMANCE CRITERIA
	1.4 View magnification is set for ease of working with graphics
2 Produce objects	2.1 Ruler units are set and grid is displayed to ensure artwork meets design specifications 2.2 Tools are used to produce objects, required attributes are entered and shapes manipulated, until graphic framework is finalised 2.3 Lines and curves are adjusted and edited to fit design specifications 2.4 Objects are painted and transposed, and strokes and effects are scaled according to design brief 2.5 Colours are created, edited and saved to colour palette and saturation of colour is adjusted 2.6 Colour and appearance attributes are selected and copied, as required 2.7 Gradients fills, mesh and patterns are used to paint and blend according to layout and design brief
3 Alter objects	3.1 Objects are grouped or individually selected, moved, scaled or rotated using a variety of methods 3.2 Objects are reflected, sheared and distorted according to design brief 3.3 Three dimensional objects are formed and edited and gradient colour added to create depth 3.4 Perspective of objects is adjusted, as required 3.5 Transformations are repeated according to design brief 3.6 Smooth colour blends are created between objects, and blends are modified as required to meet design brief
4 Add type as a graphic element	4.1 Required type is added to type containers, and type attributes and formatting are set to reflect design brief 4.2 Type is wrapped or placed along a path to complement graphics 4.3 Type is converted to type outlines or letterforms, and shapes are modified
5 Set appearance attributes and styles	5.1 Properties of graphic are set to meet the design brief 5.2 Effects are added to a graphic and edited to make appearance fit design brief 5.3 Appearances required for further use are saved as styles
6 Set up layers	6.1 Objects are organised in layers and stacking order is controlled

ELEMENT	PERFORMANCE CRITERIA
	6.2 Layers are locked and/or nested and grouped according to design brief 6.3 Styles are added or removed from layers when layer consistency is or is not required
7 Finalise document	7.1 Appropriate format for saving graphic is identified given various elements in the graphic 7.2 Resolution for effects and any filters are set based on image quality 7.3 Document is checked to ensure correct layout file and that all elements are printable 7.4 Portable Document Format (PDF) or other export options are fixed to best settings for final medium and file is exported and saved

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 2.3, 2.7, 3.2, 3.5, 3.6, 4.1, 5.1, 5.2, 6.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	4.2, 7.2	Gathers information from a range of sources to record using headings, instructions and layout that meet audience needs and text purpose
Numeracy	3.4	Selects and uses appropriate familiar mathematical problem-solving strategies to solve problems in familiar contexts
Get the work done	1.1-1.4, 2.1-2.7, 3.2-3.6, 4.1-4.3, 5.1-5.3, 6.1-6.3, 7.1-7.4	- Determines job priorities, resources and equipment, and works logically and systematically to undertake clearly defined and familiar tasks - Initiates standard procedures when responding to familiar problems within immediate context - Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to complete routine tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP225 Produce graphics using a graphics application	ICPPP225C Produce graphics using a graphics application	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP225 Produce graphics using a graphics application

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop graphics based on a client brief using a high-end application
- demonstrate ability to find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- correctly identify image formats
- identify correct application to be used
- explain how graphics can be manipulated
- identify different colour models
- identify attributes of appearance
- list different effects that may be applied to an object
- explain use of filters
- list text and formatting features used in graphics
- outline key requirements when interpreting a brief.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to:

- special purpose tools, equipment and material

- industry standard computer
- current software applications used to produce graphics.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP231 Manually combine spot colour and basic four-colour images

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manually prepare images and film and combine elements and prepare registration and artwork for the next production stage.

It applies to individuals in the printing industry who design and prepare layouts and artwork and manipulate images and texts to meet production requirements. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Evaluate images for combining	1.1 Screen rulings are checked according to job specifications and enterprise procedures 1.2 Dot percentages are checked according to job specifications and enterprise procedure 1.3 Image orientation is checked according to job specifications
2 Contact film	2.1 Frame is prepared for contacting according to enterprise

ELEMENT	PERFORMANCE CRITERIA
	procedures 2.2 Film is contacted using a vacuum frame and using predetermined exposures according to job specifications
3 Combine film manually	3.1 A range of basic combining techniques is identified to meet diverse client requirements and film substrates 3.2 Film is combined employing brush skills to achieve opaquing according to job specifications 3.3 Film is combined adding masks according to design specifications 3.4 Film is combined adding tints and stipples according to design specifications
4 Combine paste-up elements manually	4.1 Film is combined adding tints and stipples according to design specifications 4.2 Screen, line and type images are combined on base sheet according to job specifications 4.3 Masks are produced and positioned on base sheet to add tints, stipples and colour according to design specifications 4.4 Rules, keylines and cut marks are drawn according to job specifications 4.5 Assembled paste-up is checked for squareness, accuracy in positioning of elements and cleanliness of work
5 Maintain register of combined images	5.1 Punch register systems are applied to combine images 5.2 Registration of combined images is accurately placed to ensure alignment of film 5.3 Registration of combined images is accurately secured to ensure alignment of all components
6 Prepare finished film and artwork for next production stage	6.1 Finished film and artwork are laid-down and spaced according to specified paper size identified in job specifications 6.2 Pages and film are pasted up to suit given imposition

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.2, 3.1, 3.2, 3.4, 4.1-4.4, 6.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Navigate the world of work	1.1, 1.2, 2.1	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Get the work done	1.1-1.3, 2.1, 2.2, 3.1, 3.2, 3.4, 4.1-4.4, 5.1-5.3, 6.1, 6.2	- Plans, identifies and assembles resources required to complete tasks in logical sequence - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP231 Manually combine spot colour and basic four-colour images	ICPPP231C Manually combine spot colour and basic four-colour images	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP231 Manually combine spot colour and basic four-colour images

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare and assemble TWO designated layouts, using a variety of selected image elements, following job brief and according to listed performance criteria (finished film and artwork must be laid-down and spaced according to printer's imposition identified in job specifications and registration of combined images accurately secured)
- find and use information relevant to the task from a variety of information sources
- demonstrate skill of combining safe light and room light environments using various light sensitive materials, exposure and processing systems.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain how printing processes affect requirements for combining
- list appropriate films used for contacting and duplicating
- outline procedure for establishing basic exposure data for contact emulsions
- describe spreading and choking requirements for preparation of a mask
- identify techniques used to control degree of spread and choke
- detail requirements of an effective pin registration system
- name main types of pin register systems and outline their applications\
- list manuals, safety and other documentation relevant to this task and identify where are they kept and what information is included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP232 Electronically combine and assemble data

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to electronically combine and assemble data to produce a page layout.

It applies to individuals in the printing and graphic art industry who design and prepare layouts and artwork, and manipulate images and texts to meet production requirements. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Plan and prepare the work	1.1 Computer functions are undertaken to access required data from electronic files 1.2 Required data is checked to ensure correct format for software application and output 1.3 System is checked for required fonts to fulfil job specifications 1.4 Storage capacity of system is checked for sufficiency

ELEMENT	PERFORMANCE CRITERIA
2 Combine data	2.1 Pages are composed according to job specifications 2.2 Elements are placed on page according to job specifications 2.3 Trapping is applied according to job specifications 2.4 Image output is prepared and appropriate colour profiles are applied according to media output
3 Create multiple images	3.1 Basic step and repeat layout is prepared according to job specifications 3.2 Appropriate software for step and repeat is accessed according to job specifications 3.3 Images are stepped according to job specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 2.1-2.3, 3.1-3.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Get the work done	1.1-1.4, 2.1-2.4, 3.1-3.3	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Applies analytical processes to resolve problems - Initiates standard procedures when responding to familiar problems within immediate context - Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to create and save files in required format

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP232 Electronically combine and assemble data	ICPPP232C Electronically combine and assemble data	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP232 Electronically combine and assemble data

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use a desktop platform (or high-end system) with appropriate layout, design and drafting software, to combine and assemble TWO jobs following the job brief and according to the listed performance criteria. (Since underlying skills associated with combining and assembling should be transferable across the design and pre-press sectors, it is important that substrates be identified along with the associated printing process that is being simulated.)
- find and use information relevant to task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain how to create a page layout according to job specifications
- describe function of electronic trapping of image elements as applied to image assembly
- explain how trapping relates to job specification
- outline how step and repeat layout is prepared to suit a job specification
- list main criteria for evaluating final output
- outline requirements of a contract proof as compared to an in-house check proof
- list manuals, safety and other documentation relevant to this task and identify where are they kept and what information is included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

In a pre-press environment many individuals are required to be competent in the use of more than one page layout application.

If this unit is to be used to assess competency with page layout applications, it should be used as a secondary unit to ICPPP224 Produce pages using a page layout application. It should be used when an additional page layout application is being assessed or taught.

It is not to be used to assess an individual on the same page layout application as ICPPP224 Produce pages using a page layout application. In other words, the individual should not receive two units of competency for one page layout application.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP252 Output images

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare an output device for outputting images. Devices may include, but are not limited to, plate setters, image setters and commercial digital printers.

It applies to individuals in the printing and graphic art industry.

Typically these individuals design and prepare layouts and artwork, and manipulate images and texts to meet production requirements. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare output device	1.1 Output devices are prepared according to manufacturer's and job specifications 1.2 All required proofs and checks are completed prior to outputting images
2 Output image	2.1 System is activated to initiate output according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	2.2 Print queues are managed to ensure efficient production 2.3 Image output is evaluated to ensure it conforms to job specifications 2.4 Image is prepared for next stage of production process according to job specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 2.3, 2.4	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Get the work done	1.1, 1.2, 2.1-2.4	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles resources required - Applies analytical processes to resolve technical problems - Initiates standard procedures when responding to familiar problems within immediate context - Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to create and save files in required format

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP252 Output images	ICPPP252C Output images	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP252 Output images

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- calibrate and use at least TWO devices to output electronic images to film, paper or plate, according to listed performance criteria
- find and use information relevant to the task from a variety of information sources
- provide proofed, error-free final output to digital printer/plotter that conforms to the job specifications
- identify substrate for reproduction
- demonstrate a clear understanding of printing processes.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe types of output devices used in pre-press
- outline considerations that determine application of these devices
- explain function of calibration software
- describe procedure for downloading a file to output device
- outline main considerations to ensure accurate transfer of files
- describe correct handling and material loading of the output device
- explain how to identify a correctly processed image
- list factors that control image quality through a processor
- list criteria for identifying a correctly transferred file
- detail requirement of image to meet job specifications
- outline criteria to ensure final image meets job specifications
- list criteria for evaluating a final film
- list manuals, safety and other documentation relevant to this task and identify where they are kept and what information is included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP260 Proof images

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to proof images, including chemical or digital, and prepare the proof for the next stage of production.

It applies to individuals in the printing and graphic art industry who design and prepare layouts and artwork, and manipulate images and texts to meet production requirements. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Set up and maintain proofing equipment	1.1 Proofing equipment is set up and maintained according to manufacturer's specifications and enterprise standards 1.2 The working environment is cleaned and maintained to ensure proof quality 1.3 Proofing materials are used cost efficiently according to job contract costs
2 Expose and process	2.1 Quality control of proof is maintained according to job

ELEMENT	PERFORMANCE CRITERIA
proof	specifications 2.2 Images are positioned accurately on proof according to job specifications 2.3 Work Health and Safety (WHS) requirements are observed to ensure safe use of equipment 2.4 Proof is prepared for presentation ready for next stage of the process

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 2.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Navigate the world of work	1.1, 1.2, 2.3	Recognises and follows explicit and implicit protocols and meets expectations associated with own role
Get the work done	1.1-1.3, 2.1, 2.2, 2.4	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources - Applies analytical processes to resolve technical problems - Initiates standard procedures when responding to familiar problems within immediate context - Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to design and save files in required format

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP260 Proof images	ICPPP260C Proof images	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP260 Proof images

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare and set up proofing area to produce digital or chemical proofs of TWO four-colour separated images according to listed performance criteria. (Since underlying skills associated with digital or chemical proofing should be transferable across a range of systems, it is important to identify substrates along with the associated printing process that is being simulated.)
- position images accurately on proof according to job specifications so proof is ready for the next stage
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe work health and safety (WHS) issues in proofing area
- outline main considerations for setting up the proofing environment
- explain how correct exposure levels for the proofing system are chosen
- identify actinic light requirements
- name aids used to control and ensure repeatability in proofing
- describe considerations when matching a proof to output requirements
- identify correct stock for output device
- explain how incorrect processing of chemical proof is identified
- outline corrective action to take if incorrect processing occurs
- list main criteria for proof evaluation
- describe lighting conditions required for evaluating proofs
- list special requirements for Pantone Matching System (PMS) proofs

- list manuals, safety and other documentation relevant to this task and identify where they are kept and what information is included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP266 Produce relief plates

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to make and proof relief plates from film input for letterpress or label printing. It requires the individual to correctly prepare and evaluate film, and expose and process a relief plate suitable for letterpress and label printing.

It applies to individuals in the printing and graphic art industry who design and prepare layouts, artwork, manipulate images and texts to meet production requirements. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Produce plates	1.1 The plate processor is prepared and maintained according to manufacturer's specifications and enterprise standards 1.2 Exposure control is established and maintained utilising vacuum frames and plate processors according to job specifications 1.3 Plates are produced that conform to job specifications
2 Proof relief plates	2.1 Relief plates are proofed according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	2.2 Relief plates are proofed according to enterprise and manufacturer's specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1, 2.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Navigate the world of work	1.1, 2.2	Recognises and follows organisational policies and procedures
Get the work done	1.1-1.3, 2.1, 2.2	- Determines priorities and sequences steps involved in clearly defined, familiar tasks - Applies analytical processes to resolve problems - Initiates standard procedures when responding to familiar problems within immediate context

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP266 Produce relief plates	ICPPP266C Produce relief plates	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP266 Produce relief plates

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce TWO printing plates using plate-making facilities and according to job specifications and the listed performance criteria. (Since the underlying skills of plate production should be transferable across a range of systems, it is important that substrates be identified along with the associated printing process that is being simulated.)
- ensure plate(s) meets job specifications and is accurately proofed
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list main factors to be considered when preparing to lay a plate
- list aids that can be used to ensure accuracy and repeatability
- name quality control or problem-solving devices that can be included
- outline essential criteria for evaluating a film to be used in plate production
- describe process when testing exposure for plate making
- outline main considerations with a plate exposure system
- explain how to ensure continuity and control with plate exposure
- describe plate processing operation
- outline key factors of poor processing operation
- list main criteria for evaluating a correctly prepared plate
- outline work health and safety (WHS) concerns when processing and proofing printing plates
- explain main advantages of plate proofing
- outline criteria for plate proof evaluation
- explain different requirements for plates for litho printing, and relief printing

- list manuals, safety and other documentation relevant to this task and identify where they are kept and what information is included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP267 Produce offset lithographic plates

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to make lithographic plates from film input. For plates with electronic input see *ICPPRP452 Output complex images direct to plate or press*.

It requires the individual to correctly prepare, expose and process a lithographic plate, and post-treat the plate to satisfy job specifications.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Select and prepare plate	1.1 Job specifications are interpreted to determine appropriate type and size of plate for the job 1.2 Plate is selected to deliver quality of output required by the job brief 1.3 Plate is prepared to accommodate printing machine plate positioning requirements
2 Expose plate	2.1 Work area is tidied and cleaned to ensure quality of output

ELEMENT	PERFORMANCE CRITERIA
	2.2 Film is correctly positioned on plate according to job specification 2.3 Correct exposure unit is selected to deliver required output 2.4 Exposure control is correctly established utilising a quality-control step wedge 2.5 Exposure and vacuum frame are maintained according to manufacturer's specifications
3 Process plate	3.1 Plate processing unit is maintained according to manufacturer's specifications 3.2 Plate is processed according to plate manufacturer's specifications
4 Post-treat plate	4.1 Plate is checked for quality of outcome and analysed for conformance to job specifications 4.2 Changes to plate image are carried out correctly to ensure standard of output required by the job brief 4.3 Plate is chemically treated and/or baked according to job specifications 4.4 Plate is prepared for storage prior to printing according to manufacturer's specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.2, 2.5, 3.1, 3.2, 4.1-4.4	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Navigate the world of work	2.1	Recognises and follows organisational and legislative requirements associated with own role
Get the work done	1.1-1.3, 2.2-2.5, 3.1, 3.2, 4.1-4.4	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources - Applies analytical processes to resolve technical

		problems • Initiates standard procedures when responding to familiar problems within immediate context

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP267 Produce offset lithographic plates	ICPPP267C Produce offset lithographic plates	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP267 Produce offset lithographic plates

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare, set up and use lithographic plate exposure and plate processing equipment to produce a lithographic plate manually, and another using a machine according to listed performance criteria
- process plate according to plate manufacturer's specifications
- carry out changes to plate image correctly, to deliver standard of output required by the job brief
- identify substrate for reproduction and ensure plate quality is suitable for the identified printing processes; this ensures skills of plate making are transferable across the design and pre-press sectors
- find and use information relevant to task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list types of lithographic plates
- define criteria for selection of plates
- outline advantages and disadvantages of negative and positive plates
- explain plate exposure techniques and control, including:
 - why images should be centred and square
 - importance of colour bars and control strips
 - light sources used in plate exposing frames
- explain plate processing
- list work health and safety (WHS) concerns when processing printing plates
- name baths and solutions used in a plate processing machine

- explain impact of a change in processor time on the final plate
- explain plate finishing and correction
- explain purpose of gumming a plate
- outline post-exposure techniques
- list criteria used to evaluate accuracy of the plate
- discuss dot gain issues
- explain difference between physical and optical dot gain
- outline steps to overcome dot gain
- explain plate punching and registration
- detail care needed to ensure accurate punching and registration
- list manuals, safety and other documentation relevant to this task and identify where are they kept and what information is included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP268 Make photopolymer plates (flexographic)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to make flexographic plates from film inputs. It requires the individual to correctly select, prepare, process and finish photopolymer plates to meet the job specifications.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Select plate	1.1 Job specifications are interpreted to ensure appropriate plate selection 1.2 Correct plate is selected according to printing requirements and job specifications
2 Pre-plan process	2.1 Film negatives are checked for conformance with job specifications 2.2 Extra exposure masking is planned by examining film 2.3 Appropriate exposure masks are cut 2.4 Appropriate amount of plate material is calculated to ensure economical use

ELEMENT	PERFORMANCE CRITERIA
3 Expose plate	3.1 Exposure is determined by using step wedges and depth gauge to establish correct front and back exposure time 3.2 Plate is exposed according to job specifications 3.3 Exposure unit and vacuum frame are maintained according to manufacturer's specifications
4 Develop plate	4.1 Chemistry balance is maintained according to manufacturer's specifications 4.2 Washout unit is maintained according to manufacturer's specifications 4.3 Plate is washed out to pre-determined depth pre-set by front and back exposures
5 Finish plate	5.1 Plate is dried in a drying oven at a temperature and time according to manufacturer's specifications 5.2 Back of the plate is cleaned 5.3 Plate is post-exposed according to manufacturer's specifications 5.4 Plate is light finished according to manufacturer's specifications 5.5 Work Health and Safety (WHS) procedures are observed to ensure a safe working environment when making plates
6 Establish and maintain a chemical register	6.1 Chemical register is established to identify and describe purpose of each chemical and ensure finished plates meet set specifications 6.2 All chemicals used in the workplace are identified and registered correctly according to safe working practices

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 3.2, 3.3, 4.1, 4.2, 5.1, 5.3, 5.4, 6.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Numeracy	2.4, 3.1	Interprets and comprehends a range of everyday mathematical information used in familiar and routine

		tasks
Navigate the world of work	5.5, 6.1, 6.2	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Get the work done	1.1, 1.2, 2.1-2.4, 3.1-3.3, 4.1-4.3, 5.1, 5.3, 5.4	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles resources required - Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Applies analytical processes to resolve technical problems and initiates standard procedures when responding to familiar problems within immediate context

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP268 Make photopolymer plates (flexographic)	ICPPP268C Make photopolymer plates (flexographic)	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP268 Make photopolymer plates (flexographic)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce TWO flexographic plates, with different characteristics
- correctly finish plates to meet the job brief, according to manufacturer's specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain effect flexographic ink has on selection of plate material
- describe effect of 'shoulder' on the printing process
- outline ways to overcome 'orange peel effect'
- describe effects of chemicals used in detaching
- name methods to counteract image elongation
- list manuals, safety and other documentation relevant to this task and identify where are they kept and what information is included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP269 Produce photopolymer plates for pad printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to make plates (cliches) from film inputs for pad printing.

It requires the individual to correctly select, prepare, process and finish photopolymer plates for pad printing according to the job specifications.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Select plate	1.1 Job specifications are interpreted to ensure appropriate plate selection 1.2 Correct plate is selected according to printing requirements and job specifications
2 Pre-plan process	2.1 Film positives are flattened to prevent air entrapment 2.2 Any exposure unit is energised for one cycle to warm up UV elements where necessary 2.3 Appropriate screen film positive is selected and checked

ELEMENT	PERFORMANCE CRITERIA
	according to printing requirements
3 Expose plate	3.1 Exposure is determined by using a quality control step wedge to establish correct exposure time 3.2 Plate is exposed to standard/established exposure time 3.3 Plate is exposed with screen film positive according to job specifications 3.4 Exposure unit and vacuum frame are maintained according to manufacturer's specifications
4 Develop plate	4.1 Chemistry balance is maintained according to manufacturer's specifications 4.2 Washout tools are maintained according to manufacturer's specifications 4.3 Plate is washed out for pre-determined time established by manufacturer and in-house tests
5 Finish plate	5.1 Plate is blown-dry by compressed air 5.2 Plate is dried in a drying oven at a temperature and time according to manufacturer's specifications 5.3 Plate is post-exposed according to manufacturer's specifications 5.4 Work health and safety (WHS) procedures are observed to ensure a safe working environment when making plates
6 Establish and maintain a chemical register	6.1 A chemical register is established to identify and describe purpose of each chemical and to ensure finished plates meet set specifications 6.2 All chemicals used in work place are identified and registered correctly according to safe working practices

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 3.3, 3.4, 4.1, 4.2, 5.2, 5.3, 6.1	Recognises and interprets text to establish job requirements from information contained within relevant

		procedures and specifications
Writing	6.1, 6.2	Completes workplace records and forms accurately and legibly using correct technical and enterprise specific vocabulary
Numeracy	3.1, 3.2	Interprets and comprehends a range of everyday mathematical information used in familiar and routine tasks
Navigate the world of work	5.4, 6.1, 6.2	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	1.1, 1.2, 3.3, 3.4, 4.1, 4.2, 5.2, 5.3, 6.1	Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.2, 2.1, 2.3, 3.1, 3.3, 3.4, 4.1-4.3, 5.2, 5.3	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles resources required - Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency and responding to familiar problems within immediate context

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP269 Produce photopolymer plates for pad printing	ICPPP269C Produce photopolymer plates for pad printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP269 Produce photopolymer plates for pad printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce TWO photopolymer plates with different characteristics according to the listed performance criteria
- transfer underlying skills of plate making across the design and pre-press sectors (it is important the substrate for reproduction is identified and the quality of the plate is fit for the identified printing processes)
- correctly prepare plate to meet the job brief and manufacturer's specifications
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain effect of print life requirement on selection of plate material
- explain effect screen dot has on the printing process
- outline work health and safety (WHS) requirements for photopolymer plate chemicals
- explain how to overcome undercutting of screens
- outline methods to counteract air entrapments between film and plate
- list manuals, safety and other documentation relevant to this task and identify where are they kept and what information is included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP272 Produce gravure cylinders manually

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manually make gravure cylinders.

It requires the individual to manually make gravure cylinders by planning, selecting, exposing and developing the plate, and establishing and maintaining a chemical register.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Select plate	1.1 Job specifications are interpreted to determine the appropriate type of cylinder base and/or shell for the job 1.2 Cylinder and/or shell is selected to deliver output quality required by the job brief
2 Pre-plan process	2.1 Work area is tidied and cleaned to ensure output quality and a safe worksite 2.2 Exposure and coating equipment is maintained according to manufacturer's specifications and safety requirements 2.3 Exposure is controlled using step wedges and densitometry

ELEMENT	PERFORMANCE CRITERIA
	2.4 Cylinder is coated according to manufacturer's specifications 2.5 Cylinder is exposed making sure image direction, autotrons and tracker lines are correctly positioned according to job specifications 2.6 Work health and safety (WHS) requirements are observed when handling chemicals
3 Expose plate	3.1 Chemical balance is checked and maintained in developing tank 3.2 Cylinder is developed according to manufacturer's specifications, enterprise procedures and safety requirements
4 Develop plate	4.1 Etching bath is maintained to correct activity level according to manufacturer's specifications and enterprise procedures 4.2 Cylinder is etched according to the job specifications (cell depth)
5 Finish plate	5.1 Establish a chemical register to identify and describe purpose of each chemical and ensure finished cylinders meet set specifications 5.2 All chemicals used in the workplace are identified and registered correctly according to safe working practices

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.2, 2.4, 2.5, 3.2, 4.1, 4.2, 5.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	5.1, 5.2	Completes workplace records and forms accurately and legibly using correct technical and enterprise specific vocabulary
Navigate the world of work	2.1, 2.2, 2.6, 3.2, 4.1, 5.1, 5.2	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Get the work done	1.1, 1.2, 2.2, 2.4, 2.5, 3.1, 3.2, 4.1, 4.2	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources - Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining

		elements for greater efficiency • Initiates standard procedures when responding to familiar problems within immediate context

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP272 Produce gravure cylinders manually	ICPPP272C Produce gravure cylinders manually	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP272 Produce gravure cylinders manually

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- manually produce TWO gravure cylinders and establish and maintain a chemical register according to the listed performance criteria
- safely and correctly process the cylinder to ensure etching produces a quality print
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- state chemical names and symbols for three chemicals used in cylinder production
- describe standard safety procedures used when handling gravure chemicals
- describe two methods of manual gravure cylinder production
- explain cylinder balancing and how it is achieved
- outline preparation processes for both steel and aluminium cylinder bases
- explain Blue Print and how it is produced
- outline Direct Transfer method of cylinder production
- explain how cell depth is determined
- identify etching solution chemical
- state thickness of chrome coating on the etched surface
- outline factors that govern rate of etch
- list manuals, safety and other documentation relevant to this task, identify where are they kept and what information is included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP281 Design basic carton

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to design cartons using and adapting existing templates.

It requires the individual to design a basic carton using known templates that meet the job specifications and then produce an accurate sample before the final design is sent for output.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry. They generally work under direct supervision, and use limited practical skills and fundamental knowledge in a defined context.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Assess brief requirements	1.1 All relevant information in the brief is checked, e.g. carton type, dimensions, material 1.2 All relevant requirements of the brief are assessed in line with enterprise specifications

ELEMENT	PERFORMANCE CRITERIA
2 Select and modify template	2.1 Appropriate template is selected on the Computer Aided Design (CAD) system 2.2 Height, width and depth and gluing flap dimensions are adjusted according to the client brief 2.3 Requirements for knife setting and stripping in production are checked and position is designed to have correct grain direction and maximise use of material
3 Use plotter to cut sample	3.1 Plotter is set up ready for downloading design 3.2 Cutting and creasing depths are set 3.3 Material is positioned correctly 3.4 Plotter is operated safely according to manufacturer's specifications and enterprise procedures 3.5 Routine machine maintenance is carried out as required
4 Assemble sample	4.1 Sample is cut by hand 4.2 Cut sample is folded and glued by hand ensuring angles and construction are correct 4.3 Originals and elements are selected, scaled and cropped appropriately to fit allocated grid space
5 Check and adjust design	5.1 Sample is checked to ensure conformance to the client brief 5.2 Design is adjusted if necessary to meet job specifications
6 Output design	6.1 Design is saved ready for downloading to forme cutter 6.2 Design is outputted as keyline for artwork or as film 6.3 Relevant paperwork is completed according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.2, 3.4, 5.1, 5.2	Recognises and interprets text to establish job requirements from information contained within relevant

		procedures and specifications
Writing	6.3	Completes workplace records and forms accurately and legibly using correct technical and enterprise specific vocabulary
Numeracy	1.1, 2.2, 3.2, 4.2, 4.3	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.2, 3.4, 6.3	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Get the work done	1.1, 2.1-2.3, 3.1-3.3, 3.5, 4.1-4.3, 5.1, 5.2, 6.1, 6.2	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles resources required - Takes responsibility for planning and organising own workload, and Initiates standard procedures when responding to familiar problems within immediate context - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP281 Design basic carton	ICPPP281C Design basic carton	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP281 Design basic carton

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce TWO different carton designs and samples using existing templates to meet job brief and client specifications
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline work health and safety (WHS) concerns of using computers and plotters
- list Computer Aided Design (CAD) programs available for carton design
- outline the process to correctly align a cut out positioned in a design
- list products these cartons can be used for (sleeves, full flap, auto lock, crash lock, trays)
- explain how to determine if the design is appropriate for its end use
- outline aspects of product sizing and tolerances that should be rechecked
- list carton designs suitable for machine and hand-packing
- outline constraints on design and positioning on the forme caused by knife making and production
- list manuals, safety and other documentation relevant to this task, identify where they are kept and what information is included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP283 Prepare artwork for screen printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare artwork for screen printing. It requires the individual to apply fundamental principles when combining elements and colour, and selecting appropriate type for manual and electronic design artwork.

It applies to individuals working under direct supervision, who have some accountability for the quality of output and ensuring the production process is maintained.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Assess brief requirements	1.1 Printing requirements of layout brief are determined for printing feasibility 1.2 Brief is broken down into stages of production to determine a plan of procedure 1.3 Plan of action is determined to meet time requirements of each stage so deadlines are identified and adhered to 1.4 Correct design and typographic terms are used to facilitate

ELEMENT	PERFORMANCE CRITERIA
	communication
2 Assemble layout materials	2.1 Client copy and images are assembled to conform to the client brief 2.2 Library files are accessed for relevant data to conform to the brief 2.3 Appropriate equipment and materials to complete layout are assembled to enable the brief to be undertaken efficiently
3 Construct a simple graphic design	3.1 Client requirements are checked to ensure design concept matches the brief 3.2 Preliminary graphic design ideas are sketched according to the brief 3.3 Simple graphic design concept is rendered, electronically or manually, to conform to the brief 3.4 Rendered graphic design is checked for conformance to the brief
4 Produce finished artwork	4.1 Layout grid is ruled up according to the brief 4.2 Type selection, style and size are selected for theme and readability and fitted into allocated grid space to conform to the brief 4.3 Originals and elements are selected, scaled and cropped appropriately to fit the allocated grid space 4.4 Layout components are accurately positioned using keylines to conform to the grid framework 4.5 Overlays/colour roughs are created to conform to the brief
5 Check for suitability	5.1 Layout is checked to eliminate omissions and errors 5.2 Layout design is checked for conformance to the brief 5.3 Proofs are produced for hardcopy checking 5.4 Layout is rendered ready for client presentation
6 Tidy materials and store data	6.1 Equipment and materials are returned to storage according to enterprise procedures 6.2 Design data and materials are filed ready for future retrieval according to enterprise procedures 6.3 Design area is cleaned to enterprise procedures ready for re-use

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1-2.3, 3.1-3.4, 4.1, 4.2, 4.5, 6.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	1.2, 1.3, 3.2	Completes workplace records and forms accurately and legibly using correct technical and enterprise specific vocabulary
Oral Communication	1.4	Uses detailed and clear language to contribute information and express requirements
Numeracy	1.3, 4.1-4.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	6.1-6.3	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	1.4	Uses appropriate communication protocols and conventions to confirm or clarify client requirements
Get the work done	1.1-1.3, 2.1-2.3, 3.1-3.4, 4.1-4.5, 5.1, 6.1, 6.2	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources - Takes responsibility for planning and organising own workload, and initiates standard procedures when responding to familiar problems within immediate context - Follows routine procedures for using digital technology to enter, store and retrieve information directly relevant to role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP283 Prepare artwork for screen printing	ICPPP283C Prepare artwork for screen printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP283 Prepare artwork for screen printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare TWO manual and electronic artworks for screen printing, according to client specifications
- apply design principles when combining elements and colour to prepare artwork, both manually and electronically, to the satisfaction of the client
- find and use task-relevant information from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline considerations of layout for this brief
- describe first stage of production brief
- identify most time-consuming function
- state purpose of a thumbnail
- state importance placed on detail in the first stage of the brief
- name equipment that may be used for construction of the layout
- name guides used in the design area
- outline graphic requirements included in the brief
- define how many graphic design ideas are sketched or illustrated as preliminary ideas
- list additional constraints that can be included in the concept
- explain purpose of ruling up a layout
- outline limitations of type selection on the chosen substrates
- list considerations given to elements to fit a given space
- explain use of keylines when used as element identification

- explain importance of identifying all colour(s) on rough
- outline techniques used to check for mistakes
- outline proof checks made to ensure proof conforms to the brief
- state conditions in which materials should be stored
- identify storage system used for electronic data
- identify materials that could be recycled.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP284 Produce PDF files for online or screen display

Modification History

Release	Comments
Release 2	This version first released with ICP Printing and Graphic Arts Training Package Version 1.1. Version created to correct mapping table information
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce both passive and interactive Portable Document Format (PDF) files for online or screen display. It requires individuals to prepare, create and edit PDF files and include navigation features, and manage and finalise the document.

It applies to individuals who produce both passive and interactive PDF files for use online or screen display. Individuals generally work within defined procedures, respond to clearly defined briefs, and work under limited supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare file	1.1 Document use is identified according to brief specifications 1.2 Purpose and audience are established and cultural, equity or

ELEMENT	PERFORMANCE CRITERIA
	gender requirements determined from brief or client 1.3 Changes required in media size and format are chosen from predefined settings 1.4 Relevant fonts for online readability are selected, text is formatted, chunked and article threads added as required for ease of online reading 1.5 Navigation plan or display timing is developed, and required elements or areas allocated on document 1.6 Document is checked to ensure correct layout and that all elements are printable 1.7 Unnecessary elements and blank pages are deleted, if not required 1.8 Document is proofed for colour, positioning, bleed allowance, grammar and text
2 Create PDF	2.1 Final file media is identified, and correct Distiller pre-set job options and colour management settings are chosen 2.2 Document is opened and exported to PDF or postscript file for conversion in Distiller 2.3 PDF file is exported to correct folder, opened and checked against requirements of the brief
3 Edit file	3.1 Text corrections are made using text touch-up tool, as required 3.2 Images are edited using touch-up object tool, as required 3.3 Page orientation is changed, pages inserted and deleted, as required 3.4 Bookmarks are added and named or edited with magnification added, as required
4 Perform navigation	4.1 Menus are created for major themes, with buttons and graphics consistently placed and easily identifiable by users 4.2 Internal and external links with actions are added according to the brief requirements 4.3 Navigation is consistent and traceable to ensure maximum usability and user confidence 4.4 Users are given more than one navigational option for moving through the document
5 Perform file management	5.1 Fonts and graphics are embedded where possible for greater portability

ELEMENT	PERFORMANCE CRITERIA
	5.2 All additional files are saved in correct folder and in appropriate format 5.3 All unused elements or pages are removed to reduce file size
6 Display settings	6.1 Screen display preferences are set as required to fit brief 6.2 Magnification is set for consistency of display 6.3 Transactions are applied as desired to fit brief 6.4 Actions and preferences for multimedia elements are applied to suit final media
7 Finalise document	7.1 Final file is saved to correct folder and opened to check for correct screen display and magnification 7.2 All links, bookmarks and actions are tested for functionality 7.3 Navigation is assessed for intuitive usability 7.4 Document is tested in a range of environments and platforms for consistency and predictable display 7.5 File naming conventions are logical and comparable for cross-platform use

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.4, 2.1, 2.3, 3.1, 4.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.1	Completes workplace records and forms accurately and legibly using correct technical and enterprise-specific vocabulary
Oral Communication	1.2	Participates effectively in spoken interactions by using strategies to confirm, clarify or repair understanding
Numeracy	1.3	Interprets and analyses range of mathematical information used in familiar and routine tasks
Interact with	1.2	Uses appropriate communication protocols and conventions to confirm or clarify client requirements

others		
Get the work done	1.1-1.8, 2.1-2.3, 3.1-3.4, 4.1-4.4, 5.1	• Takes responsibility for planning and organising own workload and assembles required resources • Evaluates effectiveness of decisions in terms of how well they meet stated design specifications • Utilises a broad range of features within applications to improve personal productivity, optimising software functions for specific purposes • Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts • Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to create and save files in required format

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP284 Produce PDF files for online or screen display	ICPPP284B Produce PDF files for online or screen display	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP284 Produce PDF files for online or screen display

Modification History

Release	Comments
Release 2	This version first released with ICP Printing and Graphic Arts Training Package Version 1.1. Version created to correct mapping table information
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce both passive and interactive online and screen display Portable Document Format (PDF) files
- locate and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify different file types and their use
- identify page sizes and formats for online print
- outline use of different fonts in online documents
- explain reformatting text in an online document
- identify work health and safety (WHS) standards that relate to working for long periods on computers
- name various document types.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP285 Scan a mono image

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare line or tone copy, set up a scanner and reproduce the image to meet the technical specifications suitable for print media production.

It applies to individuals who prepare images for scanning and set up the scanner to ensure the image output will meet the technical standards required for the specifications of the job and print media requirements.

Individuals generally work under supervision and within defined procedures.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare line and/or tone original for scanning	1.1 Line or tone image/copy is scaled to conform to production specifications or quality standards 1.2 Quality of line or tone image input is assessed to determine scanner settings

ELEMENT	PERFORMANCE CRITERIA
	1.3 Line or tone image is prepared for mounting to scanner ready for scanning
2 Prepare scanner	2.1 Scanner is selected and set correctly for the mono image to be scanned 2.2 Appropriate software is selected for scanning line and/or tone images
3 Scan image	3.1 Original image is scanned for reproduction 3.2 Quality of scanned image is checked against job/design specifications and printing reproduction requirements 3.3 Appropriate software is applied to scan and process the image 3.4 Image is checked for compliance with design specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.2, 3.4	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Numeracy	1.1	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1	Recognises and follows organisational requirements associated with own role
Get the work done	1.1-1.3, 2.1, 2.2, 3.1-3.4	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources - Takes responsibility for planning and organising own workload, and initiates standard procedures when responding to familiar problems within immediate context - Understands purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP285 Scan a mono image	ICPPP285A Scan a mono image	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP285 Scan a mono image

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use flat-bed or drum scanner and reproduce THREE examples of line and tone reproductions with supporting comments on set-up criteria and job specifications
- access task-relevant information from a variety of information sources
- determine capability of scanner hardware and software to meet reproduction requirements for print media
- scan images to meet requirements, ensuring they are transferrable across design, pre-press and print sectors.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe characteristics of a line or tone image
- describe printing processes and type of substrates used for printing processes
- outline work health and safety (WHS) issues associated with scanner/computer operations
- determine scanner resolution
- explain correct controls for scanner operation
- explain hardware and software requirements for line and tone scanning
- explain scanners and relevant specifications
- outline software requirements and specifications to process and output the image
- list sources of information and other documentation related to safety and scanner operation
- describe how manuals and documentation are correctly stored
- demonstrate correct use of hardware and software
- describe how reproduction requirements are matched to resolution factors and job brief.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP286 Scan images for reproduction

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to scan line images.

It applies to individuals who prepare a line copy or original for scanning, set up the scanner and ensure the quality of the scanned image meets the technical specifications of the job and final media requirements.

These individuals work under limited supervision and with defined procedures.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare line image for scanning	1.1 Line image for scanning is scaled to conform to production specifications 1.2 Quality of line image for scanning is assessed to determine scanner settings 1.3 Line image is cleaned and mounted ready for scanning

ELEMENT	PERFORMANCE CRITERIA
2 Prepare scanner	2.1 Scanner is set correctly for line images to be scanned 2.2 Appropriate software is selected for scanning and processing line images 2.3 Adjustments are made to ensure quality of scanned image
3 Scan and check image	3.1 Appropriate software is applied to scan and process line images 3.2 Original line image is scanned for reproduction according to design specifications 3.3 Quality of scanned image is checked against job specifications and printing or reproduction requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Numeracy	1.1	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Get the work done	1.1, 1.2, 2.2, 2.3, 3.1-3.3	- Takes responsibility for planning and organising own workload, and initiates standard procedures when responding to familiar problems within immediate context - Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to create and save files in required format

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP286 Scan images for reproduction	ICPPP286A Scan images for reproduction	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP286 Scan images for reproduction

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use desktop flat-bed scanner and reproduce THREE line originals, ensuring quality of scanned image meets specified quality standards and final media requirements
- locate and use task-relevant information from a variety of information sources
- ensure underlying skill of scanning images are transferable across design and pre-press sectors
- identify substrate for reproduction and ensure quality of scanned image is suitable for the identified printing processes.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe relevant printing processes and electronic media
- identify scanning requirements
- describe characteristics of a line original
- outline factors that determine line scanning resolution
- name controls that exist within the software for line scanning
- name essential hardware specifications and software requirements for line scanning
- outline specific software requirements to process and output the image
- outline work health and safety (WHS) concerns of operating a scanner and standards that relate to working for periods of time on computers
- list manuals, safety and other documentation relevant to this task, and identify where are they kept and what information is included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP311 Develop a detailed design concept

Modification History

Release	Comments
Release 2	This version released with ICP Printing and Graphic Arts Training Package Version 2.0. Version created to correct typographical error.
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce a complex graphic design from a design brief.

It applies to skilled individuals working in the printing and graphic arts industry who design and prepare layouts and artwork, manipulate images and text, and apply solutions to a defined range of problems. They may also provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPPRP211	Develop a basic design concept

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine brief specifications	1.1 Confirm brief requirements with client as required 1.2 Job details are accurately documented according to enterprise policies and procedures
2. Render graphic design	2.1 Client's requirements are translated into a design concept that accords with the brief 2.2 Different graphic design ideas/concepts are detailed, and potential of each assessed according to the brief 2.3 Unique graphic design concept is rendered, electronically or manually, to conform to the brief 2.4 Rendered graphic design is assessed for printing feasibility according to the brief requirements 2.5 Visual is produced showing position and fit of design elements to document design layout
3. Produce dummy	3.1 Range of visual interpretations of the brief are made to present options to client 3.2 Text and images are graphically presented to conform to grid layout 3.3 Basic imposition is calculated to suit printing and binding processes 3.4 Dummy is produced for copy mark-up and to obtain client feedback on design suitability
4. Produce complex finished artwork	4.1 Design concept is structured step-by-step to conform to the brief and fit grid format 4.2 Appropriate type styles are selected to conform to the client brief and printing substrate 4.3 Line reproduction quality is assessed to effect the standard of print reproduction required by client brief 4.4 Images are selected to conform to client brief and end use 4.5 Colours are selected and combined effectively using overlays to conform to client brief and end use

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1-2.4, 4.1-4.5	Recognises and evaluates text to establish job requirements from information contained within relevant systems
Writing	1.2, 2.1, 2.2	Writes a technical/design brief or a complex work instruction based on client and stakeholder requirements
Oral Communication	1.1	Participates effectively in spoken interactions to confirm or clarify understanding
Numeracy	2.5, 3.3	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.2	Follows organisational policies and procedures relevant to own role
Interact with others	1.1	Uses appropriate communication protocols and conventions to confirm or clarify client requirements
Get the work done	2.1-2.5, 3.1-3.3, 4.1-4.5	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Plans, identifies and assembles resources required to complete tasks - Responds to predictable problems and implements standard or logical solutions - Recognises importance of ongoing generation of new ideas for viability and effectiveness of a work project - Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to create and save files in required format

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP311 Develop a detailed design concept (Release 2)	ICPPRP311 Develop a detailed design concept (Release 1)	Updated to correct typographical error	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP311 Develop a detailed design concept

Modification History

Release	Comments
Release 2	This version released with ICP Printing and Graphic Arts Training Package Version 2.0. Version created to correct typographical error.
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly prepare TWO sets of design, colour roughs and finished artwork which incorporate line and tone work according to specifications of client brief and enterprise standards.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe parameters of the brief for which this artwork is being prepared
- list instruments, materials and computer equipment that will be used in producing this artwork
- outline use of colour for effect and harmony and colour composition of white light
- outline colour wheel elements and use of the Pantone Matching System
- describe effect of selecting a print or electronic output system on artwork preparation
- describe basic design principles used in preparation of layouts and revision process
- outline process for formatting, size, style and preparation of artwork when using computer equipment for layouts/colour roughs
- describe use of a Computer Aided Design (CAD) program and how it helps the work of a designer
- outline work health and safety (WHS) concerns when using cameras or computers

- describe production of bromides using a process camera and contact frame
- describe the diffusion transfer process for producing bromides
- outline operation of mono laser printers and resolution output including proportional enlargement and reduction calculations
- outline process of drawing lines, borders and corners using drawing instruments or a computer or digitiser
- outline process for dealing with faults on client supplied artwork
- describe effect of colour breakdown and sequence on printing operations and printed jobs
- describe method used for checking size and scale of reproduction
- outline process for matching artwork to customer's specifications as outlined on the job sheet
- describe methods used for assessing quality and suitability of externally produced artwork
- describe problems that can be caused by using sub-standard and unsuitable artwork.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and material.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP321 Produce a typographic image

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to typeset text in various sizes and shapes and images, position typographic images correctly, and proof them for errors.

It applies to skilled individuals working as pre-press tradespeople in the printing and graphic arts industry who design and prepare layouts and artwork, manipulate images and text, and apply solutions to a defined range of problems. They may also provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPRP221	Select and apply type

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Select and evaluate	1.1 Typeface, type-size, letter and word, and line spacing are

ELEMENT	PERFORMANCE CRITERIA
typography	selected according to design setting requirements 1.2 Typeface and type-size are evaluated for suitability to retain required characteristics through the set of reproduction stages according to design brief and printing process
2 Position images	2.1 Images are positioned accurately according to design specifications 2.2 Overall balance and emphasis of composition conform to the brief
3 Produce and proof type	3.1 Type is produced either on a keyboard from copy using appropriate layout and design and typesetting technology, or by transferring information electronically into the typesetting program 3.2 Typographic quality is checked and adjusted to meet job specifications 3.3 Proofreading is carried out to ensure typesetting meets job specifications 3.4 Proofs are marked-up with correct proofreading marks and changes made
4 Assess text for punctuation and grammar	4.1 Text is read and errors in grammar, punctuation and word-breaks are identified 4.2 Errors and omissions are corrected in consultation with client

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 2.2, 3.1-3.4, 4.1, 4.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.1, 3.4, 4.2	Completes workplace records and forms accurately and legibly using correct technical and enterprise-specific vocabulary
Oral Communication	4.2	Uses appropriate vocabulary, including technical language relevant to role and context

Numeracy	1.2, 2.1	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1, 1.2, 2.1, 2.2, 3.1-3.4	Recognises and follows explicit and implicit protocols and meets expectations associated with own role
Interact with others	4.2	Uses appropriate communication protocols and conventions to confirm or clarify client requirements
Get the work done	1.2, 2.1, 2.2, 3.1-3.4, 4.1, 4.2	- Takes responsibility for planning and organising own workload and assembles required resources - Evaluates effectiveness of decisions in terms of how well they meet stated design specifications - Recognises and takes responsibility for addressing predictable, and some less predictable problems in familiar work contexts - Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to create and save files in required format

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP321 Produce a typographic image	ICPPP321C Produce a typographic image	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP321 Produce a typographic image

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly use manual or electronic equipment and suitable software to select, set, arrange, evaluate and modify type for TWO different design briefs according to the job specification.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe how choice of typeface selected is influenced by the printing process, or the electronic medium influence on choice of selected typeface
- name appropriate number of characters generally accepted in a line of text type
- describe relationship between point size and column width
- describe how viewing distance of the final product effects point size selection
- describe kerning use and why it might be applicable
- outline considerations of selecting a type face to be used on a particular product
- list ten proofreading marks and their meanings
- list three different ways of writing 'there' and explain meaning of each
- outline uses of an apostrophe and describe how apostrophes are often misused
- identify manuals, safety and other documentation relevant to this task, where are they kept, information that is included in these documents, and other sources of available information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP322 Digitise images for reproduction

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to scan images, including line-art, greyscale and colour originals.

It applies to skilled individuals working as pre-press tradespeople in the printing and graphic arts industry who design and prepare layouts and artwork, manipulate images and text, and apply solutions to a defined range of problems. They may also provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Mount original copy	1.1 Original image is scaled and identified according to job specifications 1.2 Work surfaces are cleaned and prepared to ensure images are dust free 1.3 Original image is mounted according to enterprise procedures 1.4 Work health and safety (WHS) issues are identified and correct

ELEMENT	PERFORMANCE CRITERIA
	practices are used if solvents are applied
2 Set up scanner	2.1 Scanner is set up and calibrated according to specifications 2.2 Data from copy evaluation and aim points to suit original are entered correctly onto scanner according to specifications 2.3 Scanner software or plug-in is selected
3 Produce images	3.1 Medium being scanned is selected according to job specifications 3.2 Disk capacity is checked, where appropriate, to ensure sufficiency for the job 3.3 Processor is set and checked according to job specifications 3.4 Images are scanned as required according to job specifications 3.5 Scanned images are checked against technical specifications of job and adjustments made if necessary

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 2.2, 3.1, 3.3-3.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Numeracy	2.1	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.2, 1.4	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Get the work done	1.1-1.3, 2.1-2.3, 3.1-3.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks; and identifies and assembles required resources - Takes responsibility for planning and organising own workload, and initiates standard procedures when responding to familiar problems within immediate context - Understands purposes, specific functions and key

		features of common digital systems and tools and operates them effectively to prepare and save files in required format

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP322 Digitise images for reproduction	ICPPP322C Digitise images for reproduction	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP322 Digitise images for reproduction

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly use a medium to high-end full colour digital device to reproduce:
 - one line-art
 - one greyscale
 - one colour transparency (positive)
 - one colour reflective
 - one negative
 - one re-screen
- ensure job specifications and work health and safety (WHS) requirements are met.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify scanner settings for various printing processes or electronic media and correctly calibrate scanner
- name primary colours and colour mixing principles
- outline variables influencing colour separation requirements
- describe importance of tone gradation and grey balance
- discuss need to apply colour correction
- describe factors influencing selection of screen ruling and dot percentage
- outline impact output resolution has on final screen ruling
- outline WHS standards for operating a scanner

- identify manuals, safety and other documentation relevant to the task, where they are kept, the information included in these documents, and where other sources of information may be found
- identify WHS standards that relate to working for periods of time on computers.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP323 Photograph and produce halftone images

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake advanced graphic arts camera work and evaluate output to ensure it meets design and production quality standards

It applies to skilled individuals working as pre-press tradespeople in the printing and graphic arts industry who design and prepare layouts and artwork, manipulate images and text, and apply solutions to a defined range of problems. They may also provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Evaluate copy	1.1 Copy is scaled and gradation aim points selected to produce required output 1.2 Screen rulings, angles, tone gradation, dot percentages, and dot shapes are selected according to job specifications 1.3 Rescreens and mono conversions from colour originals are evaluated for reproduction requirements

ELEMENT	PERFORMANCE CRITERIA
2 Prepare for exposure	2.1 Camera is cleaned and prepared and lights are set to deliver an even distribution of light 2.2 Exposure program is set according to stock and print conditions 2.3 Densities are measured on copy according to evaluation 2.4 Exposure programs for special effects and duotones are calculated to deliver job requirements
3 Process and evaluate image	3.1 Processor is checked and maintained within tolerances 3.2 Film is processed according to job specifications 3.3 Image is checked for size, gradation, cleanliness and dot percentages according to job specifications
4 Solve technical photographic problems	4.1 Technical problems relevant to tone and reproduction of photographic images are resolved by reassessing elements for photography, camera operations or brief amendment in consultation with client 4.2 Images are photographed with potential to be reproduced according to the brief

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 3.2, 3.3, 4.1, 4.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Oral Communication	4.1	Participates effectively in spoken interactions using vocabulary relevant to role and context
Numeracy	2.2-2.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Interact with others	4.1	Uses appropriate communication protocols and conventions to confirm or clarify client requirements
Get the work done	1.1-1.3, 2.1-2.4, 3.1, 3.3, 4.1, 4.2	- Takes responsibility for planning and organising own workload and assembles required resources - Recognises and takes responsibility for addressing

		predictable, and some less predictable, problems in familiar work contexts • Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to prepare and save files in required format

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP323 Photograph and produce halftone images	ICPPP323C Photograph and produce halftone images	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP323 Photograph and produce halftone images

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly use a graphic arts camera to photograph and process at least THREE continuous tone originals with different contrast characteristics according to the specific job requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe how halftone images are varied to suit different printing processes
- describe main characteristics of a halftone image and factors that influence selection of highlight and shadow points (first and last printing tones)
- outline process of overcoming problems associated with reproduction of screened copy
- describe method of calibrating densitometer and copy measurement
- outline preparation of a basic exposure program and factors that influence basic exposure data
- describe process for applying exposure data to selected copy and factors that could cause a change of exposure, including use of a grey scale to assist in exposure control
- outline criteria for evaluation of a halftone image and affect a change to processing conditions may have on the final result
- describe image requirements for various printing processes
- outline evaluation criteria for a duotone
- identify manuals, safety and other documentation relevant to this task, where are they kept and information included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to a graphic arts camera, special purpose tools, equipment and material.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP324 Create pages using a page layout application

Modification History

Release	Comments
Release 2	This version released with ICP Printing and Graphic Arts Training Package Version 2.0. Version created to correct typographical error
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to compose pages according to a client design brief, using a high-end application.

It applies to skilled individuals who design and prepare layouts and artwork, manipulate images and text, and apply solutions to a defined range of problems. They may also provide leadership and guidance to others, with limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPPRP224	Produce pages using a page layout application

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm client design brief	1.1 Details of client design brief are reviewed and clarified with client or supervisor 1.2 Type of document is determined and production requirements are assessed 1.3 Client copy and images are assembled to conform to design brief 1.4 Library files are accessed for relevant data to conform to design brief
2. Set up document	2.1 Master page for multiple pages and with multiple columns is set up 2.2 Required text is prepared and formatted and appropriate fonts and size are selected 2.3 Master pages, templates and style sheets, as appropriate, are used consistently to ensure data is the same after exchange or transfer 2.4 Text boxes and columns are correctly linked for text flow, and chapter heading hierarchies are selected 2.5 Colour palettes are set up according to design brief 2.6 Document set-up is completed to conform to requirements of the final media and design brief
3. Arrange elements on page	3.1 Imported text or data from other applications is correctly formatted and any cross-application formatting issues are resolved 3.2 Elements are created and arranged on page to conform to design brief 3.3 Graphics and other elements are imported from other applications and correctly formatted and arranged 3.4 Elements are arranged in layers according to design brief
4. Finalise artwork	4.1 Pages and combined elements are composed correctly to suit specified sheet size 4.2 Numerical sequence and laydown of product or mock-up is correctly identified to meet binding and finishing requirements 4.3 Bleed allowance is incorporated in margins and borders
5. Check quality	5.1 Text is reviewed for possible errors and omissions and errors are discussed with client or supervisor 5.2 Overall balance of layout and correct colour blends and gradients

ELEMENT	PERFORMANCE CRITERIA
	are maintained in arrangement of elements 5.3 Completed file is sent to be ripped 5.4 Proof is created and checked for errors, omissions and overall layout balance 5.5 Necessary changes are made, reviewed on screen, and reproofed as required 5.6 Job is saved according to enterprise procedures 5.7 Digital proof or PDF is created to present to client

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.4, 2.2, 2.5, 2.6, 3.1, 3.2, 3.4, 5.1, 5.4, 5.5	- Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications - Uses explicit strategies to make connections between information and ideas
Writing	2.2, 3.1, 5.5	- Uses a variety of strategies for planning, drafting, reviewing and proofreading own writing - Chooses appropriate text type to communicate relevant information and/or ideas effectively
Oral Communication	1.1, 5.1, 5.7	Participates effectively in spoken interactions by using vocabulary, including technical language, relevant to role and context
Numeracy	4.2, 4.3	Selects and uses appropriate mathematical strategies to solve problems in familiar contexts
Navigate the world of work	1.1, 1.3, 1.4, 2.1-2.6, 3.1, 3.2, 3.4, 4.1, 4.2, 5.6	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Takes responsibility for decisions about when and how to complete tasks and coordinates with others
Interact with others	1.1, 5.1, 5.7	Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective interaction
Get the work	1.2, 1.3, 2.2-2.6,	May operate from a broad conceptual plan, developing operational detail in stages, regularly reviewing

done	3.1-3.4, 4.1-4.3, 5.1-5.5, 5.7	priorities and performance during implementation, identifying and addressing issues • Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency • Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to complete tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP324 Create pages using a page layout application Release 2	ICPPRP324 Create pages using a page layout application Release 1	Updated to correct typographical error	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP324 Create pages using a page layout application

Modification History

Release	Comments
Release 2	This version released with ICP Printing and Graphic Arts Training Package Version 2.0. Version created to correct typographical error
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly prepare THREE different sets of page layouts according to the client's design brief.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline selection of colour qualities and behaviour for trapping during the design phase
- explain different qualities of Tagged Image File Format (TIFF) and Encapsulated PostScript (EPS) and their use
- describe process for distinguishing unmarked colours and principles of additive and subtractive colour mixing
- outline considerations given to the printing process during the design phase, and problems that can occur if the printing process is overlooked during the design stage
- describe media size to be considered during imposition, and planning for multiple colours during imposition
- identify difference between computer type versus print type
- outline importance of type to overall design and factors to be considered to ensure readability
- describe importance of design and layout when arranging artwork and typography used in design

- explain purposeful design, market segmentation and importance of understanding the target audience
- outline factors to be considered when targeting equity groups
- describe the process for creating and saving templates and creating style guides and sheets.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to applicable page layout applications.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP325 Create graphics using a graphics application

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to develop graphics incorporating a range of features for cross-media publishing based on a client brief, using a high-end application.

For this unit, the knowledge and skills cover selecting, adapting and transferring skills and knowledge to new environments, and providing technical advice and some leadership in resolution of specific problems.

It applies to individuals who perform a range of roles in a variety of contexts with some complexity in the extent and choice of options available.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Balance image quality and file size	1.1 Graphics files are opened and design brief requirements are confirmed 1.2 Graphics are repeated efficiently using a symbol or stamp to

ELEMENT	PERFORMANCE CRITERIA
	reduce file size 1.3 Slices are created from objects, layers or groups and updated as required 1.4 Type anti-aliasing is applied selectively to keep small text easy to read 1.5 Tasks are automated wherever possible and, where necessary, scripts are used for automation
2 Manipulate objects	2.1 Objects and text are manipulated and edited as required 2.2 Elements are defined for repetition, repetition tools are used to create duplicates and then are manipulated as a group 2.3 Complex shapes are created by combining shapes into compounds and, if required, compounds are edited
3 Import images	3.1 Bitmap images are embedded and/or linked in the file 3.2 Placed Bitmaps are modified and/or duplicated depending on design requirements 3.3 Bitmaps are masked and/or an opacity mask is added 3.4 Layered file is exported to image editing program for editing
4 Develop variable templates	4.1. Based on the design brief, objects are defined within the template as variables 4.2 Automated script or image server is used to ensure variations, using data stored in any Open Database Connectivity (ODBC) compliant source 4.3 Template variables are tested to ensure correct operation
5 Colour separate artwork	5.1 Correct colour separation format is determined by requirements of the pre-press workflow system 5.2 Command preferences are set correctly for print quality and process 5.3 Based on printer feedback, colour separation options are set according to print requirements of the design brief 5.4 Process and spot colours are combined, if required 5.5 Screen frequency value appropriate for the print quality is selected and colour separation preferences are saved 5.6 Spreads and chokes traps are created to avoid mis-registration 5.7 Overlapping and overprint of objects are defined 5.8 Proof is created and separations checked, any required editing is

ELEMENT	PERFORMANCE CRITERIA
	completed and file is saved
6 Prepare for final media	6.1 Metadata tags are embedded to catalogue, organise and retrieve artwork 6.2 For cross-media publishing purposes, web-safe colours are selected 6.3 File formats are chosen to best represent artwork styles 6.4 Objects are linked to create an image map meeting design requirements 6.5 Objects are layered to create animation frames and exported for animation set-up 6.6 Compression options are selected to keep image quality high and file size low 6.7 Export options are set for the final media and the file is saved and exported

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 4.1, 5.3, 6.4	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Numeracy	5.5	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Get the work done	1.1-1.5, 2.1-2.3, 3.1-3.4, 4.1-4.3, 5.1, 5.3-5.8, 6.1-6.7	- Takes responsibility for planning and organising own workload and assembles resources required - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems - Utilises a broad range of features within digital applications optimising software functions to achieve requirements

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP325 Create graphics using a graphics application	ICPPP325C Create graphics using a graphics application	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP325 Create graphics using a graphics application

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop graphics incorporating a range of features for cross-media publishing based on a client brief using a high-end application
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe image formats
- explain use of scripting languages
- explain how to manipulate text and apply formatting
- describe how to draw shapes
- explain how to manipulate images
- explain design principles which should be applied when creating graphics
- explain profiles
- outline considerations of colour management.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP331 Manually combine complex four-colour images

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake advanced manual combining of colour images.

It requires the individual to prepare images and equipment and to combine elements, separate colours and prepare registration and complex artwork for the next production stage.

It applies to individuals who work in consultation with others to ensure production and final user requirements have been met.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Plan combining strategy and prepare the work	1.1 Job components are gathered and checked according to job specifications 1.2 Dot shapes and percentages are checked according to job specifications 1.3 Correct masking technique is used to combine job economically

ELEMENT	PERFORMANCE CRITERIA
	1.4 Screen rulings and angles are checked according to job specifications 1.5 Spotting techniques are performed accurately to achieve required combining effect 1.6 Exposures and processing equipment are set up to manufacturer's specifications 1.7 Stipples and vignettes are laid at correct angles and using correct percentages
2 Combine film	2.1 Spreads, chokes, reverses, deep etchings and line and tone combinations are created according to job specifications 2.2 Colours are separated correctly according to job specifications
3 Ensure accurate registration	3.1 Register marks, register punch holes, centre lines and trim lines are calculated and aligned accurately according to job specifications 3.2 All elements are registered accurately according to design specifications
4 Apply photographic contacting	4.1 Basic exposures for contact, duplication and spreads and chokes are determined 4.2 Contact frames for contact, duplication and spreads and chokes are used correctly

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.4, 1.6, 2.1, 2.2, 3.1, 3.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Numeracy	1.4, 1.7, 3.1, 4.1	Selects and uses appropriate familiar mathematical problem-solving strategies to solve problems in familiar contexts
Get the work done	1.1-1.7, 2.1, 2.2, 3.1, 3.2, 4.1	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Responds to predictable problems and implements

		standard or logical solutions related to role in immediate work environment • Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to complete tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP331 Manually combine complex four-colour images	ICPPP331C Manually combine complex four-colour images	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP331 Manually combine complex four-colour images

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare and assemble at least TWO layouts with a variety of selected image elements following the job brief; ensuring spreads, chokes, reverses, deep etchings and line and tone combinations meet the job specification; colours are separated correctly, all elements are registered accurately and contact, duplication and spreads and chokes have correct exposure
- transfer underlying skill of combining across safelight and roomlight environments (it is important substrate for reproduction is identified and competencies demonstrated with a clear identification of printing processes)
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain how choice of printing process affects combining strategy and settings
- outline steps required to produce combined image
- identify image elements unique to this job specification
- state criteria to ensure colour separated images meet job specification/printing process
- describe masking technique which ensures accuracy and economy
- outline equipment considerations essential for accuracy
- explain method of producing spreads and chokes (trapping)
- describe how basic exposure data for contacting and duplicating emulsions is determined
- list aids to ensure quality control
- name factors that ensure quality of output through a processor
- describe procedures that ensure accuracy of registration

- list factors that ensure screen elements are assembled correctly
- explain how the correct percentage of tints is ensured
- discuss how to ensure all job specifications are met
- explain the care that must be taken when matching to Pantone Matching System (PMS) colours
- outline content and state the location of manuals, safety and other documentation relevant to this task.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP333 Electronically combine complex images

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake complex electronic combining of images. It requires the individual to assess and combine complex images, perform edits to ensure they conform to job specifications, solve technical problems and prepare the final output.

It applies to individuals working in a pre-press environment, who are required to be competent in more than one graphics application.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Assess and combine complex images	1.1 Components of complex images for reproduction are electronically evaluated for combining 1.2 Operations are planned for combining digital information from any electronic source to effect job specifications 1.3 Correct masking technique is used to combine the job economically 1.4 Combined images are manipulated, retouched and corrected

ELEMENT	PERFORMANCE CRITERIA
	electronically to conform to job specifications
2 Edit complex image	2.1 Images are retouched to conform to job specifications 2.2 Images are contoured to conform to job specifications 2.3 Colour correction is undertaken to conform to job specifications 2.4 Tonal correction is undertaken to conform to job specifications
3 Solve technical combining problems	3.1 Technical problems relevant to combining images are resolved by reassessing elements for combining or amendment of the design 3.2 Complex images are combined with potential to be reproduced according to the job brief
4 Prepare information for output devices	4.1 Disk capacity is checked for space before final assembly 4.2 Limitations of system to achieve required output are assessed 4.3 Appropriate colour profiles are applied according to job specifications
5 Manage combining system	5.1 Electronic combining system is managed effectively to facilitate storage, retrieval and outputting of data 5.2 Combining software and files are maintained to ensure an operative system

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.4, 2.1-2.4, 3.2, 4.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Get the work done	1.1-1.4, 2.1-2.4, 3.1, 3.2, 4.1-4.3, 5.1, 5.2	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment - Understands purposes, specific functions and key features of common digital systems and tools and

		operates them effectively to complete tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP333 Electronically combine complex images	ICPPP333C Electronically combine complex images	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP333 Electronically combine complex images

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce TWO jobs that combine and manipulate complex elements to be reproduced following job brief, and according to the listed performance criteria
- transfer underlying skill of combining across the design and pre-press sectors (it is important the substrate for reproduction is identified and competencies demonstrated with a clear identification of printing processes)
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain why settings need to be varied to suit subsequent printing processes or electronic output
- list factors used in determining scan resolution
- outline limitations of a Charge-Coupled Device (CCD) scanner when compared to a Photo Multiplier scanner
- list factors involved in calibrating the monitor
- outline the process of converting from an Red Green Blue (RGB) colour model to a stet colour model
- explain meaning of Native format
- list characteristics of EPS and TIFF formats
- explain meaning of Raster Image Processing (RIP)
- explain the process of RIP calibration
- name two advantages of Open Prepress Interface (OPI)
- explain difference between a bitmapped and a vector image

- state purpose of calculation menu [or equivalent] in systems work
- outline specific limitations of digital cameras
- locate manuals, safety and other documentation relevant to this task and outline information included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP334 Prepare an imposition format for printing processes

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to create layouts and impositions for printing. It requires an individual to manually develop a lay-down sheet and imposition scheme, combine components and meet production and finishing requirements.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Generate lay-down sheet and imposition scheme	1.1 Printing processes, sheet sizes and binding and finishing instructions are applied to finished artwork to generate an imposition scheme 1.2 A lay-down sheet and imposition scheme are generated according to folding and binding machine requirements and special printing requirements
2 Impose pages and combine components to final machine-sized worksheets	2.1 Pages and combined components are imposed correctly to suit specified sheet size 2.2 Numerical sequence and lay-down of product or mock-up are correctly identified to meet binding and finishing requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Get the work done	1.1, 1.2, 2.1, 2.2	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment - Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to complete tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP334 Prepare an imposition format for printing processes	ICPPP334C Prepare an imposition format for printing processes	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP334 Prepare an imposition format for printing processes

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare, set up and use a manual or software system to produce TWO layouts according to listed performance criteria and job requirements
- choose printing processes, sheet sizes, binding and finishing instructions, and numerical sequence and lay-down of the product meet job, and binding and finishing requirements
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list main considerations of preparing a layout for a printing press
- outline different working methods for sheet-fed presses
- identify image control marks important for press operation, and at binding finishing stage
- explain calculations to ensure layout size correct
- describe impact of paper considerations on type of imposition used
- outline factors that influence imposition choices
- locate manuals, safety and other documentation relevant to this task and identify included information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP352 Output complex images

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to output complex images. It requires the individual to set up an output device, and adjust and manipulate complex images or files that meet the job specifications and are free of errors.

It applies to individuals working in the printing and graphic arts industries who work under some supervision using practical skills and equipment to output complex images.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Set up and maintain output device	1.1 Devices are set up to manufacturer's specifications and enterprise standards 1.2 Output medium is calibrated by conducting exposure tests using appropriate software and hardware 1.3 Calibration is evaluated and necessary adjustments made to output device
2 Adjust and manipulate	2.1 Electronic files are evaluated as to suitability for output

ELEMENT	PERFORMANCE CRITERIA
images/files	2.2 Appropriate output resolution is set 2.3 Appropriate screen angle and dot type are set according to job specifications 2.4 Appropriate colour profiles are applied where necessary 2.5 Availability of high resolution images is assessed for Open Prepress Interface (OPI) process 2.6 Appropriate fonts availability is checked 2.7 All support files are included with the job
3 Output image	3.1 File is prepared for output to imaging device 3.2 Job queuing is managed to ensure efficient production 3.3 Images are outputted to appropriate medium 3.4 Output is processed according to job specifications
4 Evaluate result	4.1 Output is checked for correct dot size, screen angles and film density 4.2 Image elements are checked according to original job specifications 4.3 Technical problems are solved and appropriate corrections are made 4.4 Job is prepared for next stage of production

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.3, 3.4, 4.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Navigate the world of work	1.1	Recognises and follows organisational policies and procedures
Get the work done	1.1-1.3, 2.1-2.5, 3.1-3.3, 4.2-4.4	Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining

		elements for greater efficiency • Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment • Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to complete tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP352 Output complex images	ICPPP352C Output complex images	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP352 Output complex images

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce TWO complex images in which appropriate resolution, screen angle and dot type and colour profiles are applied as required to meet job specifications
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the effect selection of printing process has on output settings for final films
- outline methods/procedures available for calibrating an output device
- list consequences of incorrect calibration
- outline corrective action to take when a file does not transfer correctly
- list main points to be checked before sending a job to the *Raster Image Processor (RIP)*
- explain how selection of image resolution is affected by screen ruling
- list conditions that cause variations from conventional screen angles
- outline checks needed when preparing a job for Open Prepress Interface (OPI)
- list consequences for image quality if OPI files are not placed in their correct folders
- explain function of the low resolution file in the OPI process
- outline main factors that influence processing speed of a job when being RIPped
- explain how RIPping speed of a job can be increased
- name setting changes needed on the output device when outputting a stochastic screen
- outline factors that influence selection of the micron rating of the screen
- name main types of file formats and affects selection of a format has on processing of a job

- locate manuals, safety and other documentation relevant to this task, and identify included information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP360 Undertake special colour proofing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake special colour proofing. It requires the individual to evaluate artwork and produce colour proofs according to the job specifications.

It applies to individuals working in the printing and graphic arts industries who work under some supervision using practical skills and equipment to undertake special colour proofing.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Evaluate artwork and separations	1.1 Job is evaluated to identify required process 1.2 Job is evaluated to identify special colours
2 Produce special colour proofs	2.1 Colours are formulated according to job specifications 2.2 Film separations are exposed to appropriate medium 2.3 Colours are checked against job specifications using densitometers, spectrophotometers or visual matching to a supplied sample or <i>Pantone Matching System (PMS)</i> book

ELEMENT	PERFORMANCE CRITERIA
	2.4 Colours are proofed in correct sequence according to job specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.1, 2.3, 2.4	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Numeracy	2.3	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Get the work done	1.1, 1.2, 2.1-2.4	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment - Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to complete tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP360 Undertake special colour proofing	ICPPP360C Undertake special colour proofing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP360 Undertake special colour proofing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce TWO sets of special colour proofs that match original artwork and meet client and industry requirements
- find and use information relevant to the task from a variety of information sources
- transfer underlying skills of proofing across the design and pre-press sectors (it is important that the substrate for reproduction is identified and the quality of the image is suitable for the printing process).

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- name systems used for matching colours
- identify lighting conditions that should be used when matching colours
- list effects of humidity on special colour proofing
- outline factors to be considered when producing special colour for proofing
- explain what determines correct colour sequence
- explain how a densitometer is used for proof evaluation
- explain how colour evaluation charts are used
- list criteria for evaluating a colour proof
- explain the manuals, safety and other documentation relevant to this task and briefly outline the relevant information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP370 Produce multiple image plates

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to make plates for any printing process with repeated images from film inputs. It requires the individual to produce step and repeat layouts and set up step and repeat machines according to job specifications.

It applies to individuals working in the printing and graphic arts industries who work under some supervision using practical skills and equipment to produce multiple image plates.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Produce step and repeat layout	1.1 Client information is gathered to enable step and repeat layout 1.2 Layout is produced according to client information 1.3 Data is stored for future retrieval using industry software package 1.4 Register of stock levels is maintained, and advice about depletion of stock is recorded according to enterprise procedures
2 Set up step and repeat	2.1 Film is mounted squarely to produce an accurate image

ELEMENT	PERFORMANCE CRITERIA
machine	2.2 Accurate masks are cut for image protection/bleeds 2.3 Mounting foils are positioned in a chase to ensure a quality output 2.4 Film or plate is punched, loaded, exposed and processed according to job specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.4	Recognises and interprets text to establish job requirements from information contained within own notes, relevant procedures and specifications
Writing	1.1, 1.4	Completes workplace records and forms accurately and legibly using correct technical and enterprise specific vocabulary
Oral Communication	1.1	Participates effectively in spoken interactions using appropriate vocabulary to confirm or clarify understanding
Numeracy	2.2	Performs calculations required for accurate mounting and masking
Navigate the world of work	1.4	- Recognises and follows organisational policies and procedures associated with own role - Takes responsibility for decisions about when and how to complete tasks and coordinate with others
Interact with others	1.1	Uses appropriate communication protocols and conventions to gather client information
Get the work done	1.3, 1.4, 2.1-2.4	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment - Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to complete tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP370 Produce multiple image plates	ICPPP370C Produce multiple image plates	Updated to meet Standards for Training Packages	Equivalent units

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP370 Produce multiple image plates

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare and set up of at least TWO step and repeat layouts for production of multiple repeated images according to listed performance criteria and job specifications
- transfer underlying skills of step and repeat across different pre-press systems and printing processes
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain relationship between image of the original and the final substrate
- describe calculation required to produce final layout
- explain necessary steps to ensure correct and safe operation of the step and repeat machine
- outline work health and safety (WHS) concerns when processing printing plates
- explain how to prepare and use a mask to suit the job
- outline procedures to ensure correct registration and accuracy/repeatability of exposure
- identify manuals, safety and other documentation relevant to this task, where they are kept, and information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP372 Produce gravure cylinders electronically

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge needed to undertake electronic processes and procedures used to make gravure cylinders. It requires the individual to prepare and electronically engrave a blank cylinder to be used for gravure printing according to job specifications.

It applies to individuals working in the printing and graphic arts industries who work under some supervision using practical skills and equipment to produce gravure cylinders electronically.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Select cylinder	1.1 Job specifications are interpreted to select an appropriate cylinder and/or core 1.2 Base cylinder is selected according to job specifications
2 Pre-plan for engraving	2.1 Opels are analysed against job specifications and technical requirements of the equipment

ELEMENT	PERFORMANCE CRITERIA
	2.2 Opels are masked manually for any uneven start positioning
3 Engrave cylinder electronically	3.1 A clean work environment is maintained to ensure quality of output 3.2 Equipment is maintained according to manufacturer's specifications 3.3 Cylinder is engraved according to job specifications and enterprise procedures
4 Adjust finished cylinder	4.1 Additions and deletions are made to cylinder according to job specifications and enterprise procedures 4.2 Required changes are pre-planned

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 3.2, 3.3, 4.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Numeracy	1.1	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	3.3, 4.1	Recognises and follows organisational policies and procedures associated with own role
Get the work done	1.1, 2.1, 2.2, 3.2, 3.3, 4.1 - 4.2	- Takes responsibility for planning and organising own workload and assembles resources required - Evaluates effectiveness of decisions on how well they meet stated design specifications - Recognises and takes responsibility for addressing predictable, and some less predictable problems in familiar work contexts - Utilises a broad range of features within applications to improve personal productivity, optimising software functions for specific purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP372 Produce gravure cylinders electronically	ICPPP372C Produce gravure cylinders electronically	Updated to meet Standards for Training Packages Minor edit to Performance Criteria to clarify intent	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP372 Produce gravure cylinders electronically

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare, set up and use an electronic engraving system to produce BOTH stylus and laser gravure cylinders, according to job specifications, and ensuring the cylinder is correctly etched to ensure quality reproduction, and meets print requirements
- find and use information relevant to the task from a variety of information sources
- transfer underlying skills of cylinder making across the pre-press sector (it is important the substrate for reproduction is identified and the quality of the cylinder is suitable for the identified printing processes).

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline work health and safety (WHS) concerns when engraving cylinders
- state production parameters that should exist on the job ticket
- calculate a change in screen angle
- identify screen line ratio for fine rulings
- describe specific features of the laser engraving process
- explain how the cutting stylus can affect print quality
- outline characteristics of the diamond stylus used for colour work
- explain techniques of deleting errors on the finished cylinder
- identify manuals, safety and other documentation relevant to this task, where they are kept, and information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP382 Produce computer image for screen printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce a computer image for screen printing. It requires the individual to generate electronic art to a supplied layout film positive or computer cut stencil.

It applies to individuals working in the printing and graphic arts industries who work under some supervision using practical skills and equipment to produce computer images for screen printing.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare for scanning	1.1 Original is scaled to conform to production specifications 1.2 Original is assessed to determine scanner settings 1.3 Original is cleaned and correctly mounted according to production specifications 1.4 Correct settings are selected for original to be scanned
2 Scan and check image	2.1 Original is scanned according to quality requirements

ELEMENT	PERFORMANCE CRITERIA
	2.2 Quality of scanned image is checked for conformance to job specifications 2.3 Appropriate software is applied for any processing of text if necessary
3 Prepare combining strategy	3.1 Required data from electronic files is accessed 3.2 Appropriate application is opened to undertake combining tasks 3.3 Required fonts are accessed according to job specifications
4 Combine data	4.1 Page layout size is created according to job specifications 4.2 Elements are placed in page according to job specifications 4.3 Trapping (spread and chokes) is applied according to job specifications 4.4 Step and repeat function is accessed according to job specifications 4.5 Elements are stepped according to job specifications 4.6 Output menu is configured according to job specifications
5 Access and maintain output device	5.1 Output devices are set up and maintained according to manufacturer's specifications and enterprise procedures 5.2 Suitable material is identified and loaded into the output device
6 Output image	6.1 System is activated to initiate output according to job specifications 6.2 Quality is monitored according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 2.2, 3.3, 4.1-4.6, 5.1, 6.1	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Navigate the world of	6.2	Recognises and follows organisational policies and procedures relevant to own role

work		
Get the work done	1.1-1.4, 2.1-2.3, 3.1-3.3, 4.1-4.6, 5.1, 5.2, 6.1, 6.2	• Takes responsibility for planning and organising own workload and assembles resources required • Utilises a broad range of features of digital tools optimising software functions for specific purposes • Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP382 Produce computer image for screen printing	ICPPP382C Produce computer image for screen printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP382 Produce computer image for screen printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly scan, electronically combine and output to designated devices, TWO separate images on film and/or stencil according to job specification and client standards
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify tolerance allowed when scaling original
- identify common scanner Dots Per Inch (DPI) for graphic line images
- explain when original angling is used
- state resolution for optical character recognition in scanning
- identify format in which the scan is saved
- name formatting retained in Optical Character Recognition (OCR) scanning
- explain how external files are accessed
- identify most appropriate software for this combining task
- identify who is responsible for page layout size
- outline type of elements that can be used
- explain when trapping is applied
- explain what determines the number of step and repeats in a job
- name the first step in configuring the output menu
- list types of output devices used in screen printing
- name range of substrates used in output devices
- explain where the file is located prior to the output device

- identify and use checking techniques that maintain quality standards.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP385 Operate a database for digital printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to enter, retrieve and prepare data for personalised printing by integrating a database with a layout.

It applies to skilled individuals who design and prepare layouts and artwork, manipulate images and text, and apply solutions to a defined range of problems. They may also provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Enter and retrieve data	1.1 Data required for the job is checked and confirmed against job specifications 1.2 Data is accurately entered and completed to meet job specifications 1.3 Fields are created or modified to effectively meet job specifications while maintaining integrity of existing data

ELEMENT	PERFORMANCE CRITERIA
	1.4 Data structure is maintained according to job specifications 1.5 Automated facilities for data checking are used effectively 1.6 Data is located and retrieved as required by the job 1.7 Help function is used to find solutions to queries, if required 1.8 Files are saved to preserve data integrity and comply with organisational requirements
2 Set extraction requirements	2.1 Database fields meet placement requirements for the document format 2.2 Client data requirements are prepared by interrogating the database 2.3 Information extracted to the template is correctly processed and saved according to job specifications 2.4 Composition engine is used to achieve required data format and page layout requirements for merging variable data and static elements
3 Test data	3.1 Data is checked to ensure it is uncorrupted 3.2 Data is in correct sequence required for the run 3.3 Required dynamic links operate correctly and settings conform to job specifications 3.4 Any adjustments required are made and retested
4 Output data	4.1 Database is configured to the printer and printer output parameters are set to meet output requirements 4.2 Quality standards for data output are confirmed according to job specifications 4.3 Run is monitored to identify improvement opportunities and maintain quality

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.4, 1.7, 2.2, 2.3,	Recognises and interprets text to establish job

	3.2, 3.3, 4.2	requirements from information contained within relevant procedures and specifications
Writing	1.2	Completes workplace records and forms accurately and legibly using correct technical and enterprise specific vocabulary
Numeracy	2.1, 2.4, 4.1	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.8	Recognises and follows organisational policies and procedures associated with own role
Get the work done	1.1-1.8, 2.1-2.4, 3.1-3.4, 4.1-4.3	- Takes responsibility for planning and organising own workload and assembles resources required - Utilises a broad range of features within digital applications to complete tasks and improve personal productivity, optimising software functions for specific purposes - Recognises and takes responsibility for addressing predictable, and some less predictable problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP385 Operate a database for digital printing	ICPPP385C Operate a database for digital printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP385 Operate a database for digital printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly complete TWO different jobs, entering, retrieving and preparing data for personalised printing using both text and graphics with fixed placement.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify appropriate computer-specific applications and the process of using them
- list information found on job sheets and the process followed to ensure job requirements are met
- identify different fonts used and how they may influence database composition
- outline issues involved in deciding on image parameters
- discuss the process of storing and retrieving digital information
- outline expected production standards and any common issues that may arise.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include use of a composition engine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP386 Undertake digital proofing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake digital proofing.

It applies to individuals working as pre-press tradespeople in the printing and graphic arts industry. They typically apply solutions to a range of problems associated with the print medium. They may provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Calibrate proofing device	1.1 Machine calibration is checked for conformance to job specifications 1.2 Appropriate International Colour Consortium (ICC) profiles are applied to meet colour requirements 1.3 Paper for output is matched to profile
2 Produce proofs from digital data	2.1 Image is retrieved from the database using industry software 2.2 Data file is checked for structural compatibility with capability

ELEMENT	PERFORMANCE CRITERIA
	of the Raster Image Processor (RIP) 2.3 Special colours are sent to the RIP where appropriate 2.4 Proof is produced according to job specifications and workflow procedures 2.5 Proof is evaluated against job specifications using a densitometer, and checked against changes and original working data 2.6 Proof is prepared for client submission 2.7 Proof is used as a contract proof only if RIP is the same for both proof and film, and if client accepts it as such

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.4, 2.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Oral Communication	2.7	Participates effectively in spoken interactions to confirm client acceptance
Numeracy	2.5	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	2.4	Follows organisational policies and procedures relevant to own role
Interact with others	2.7	Uses appropriate communication protocols and conventions to confirm client acceptance
Get the work done	1.2, 1.3, 2.1-2.6	- Takes responsibility for planning and organising own workload and assembles resources required - Utilises a broad range of features within digital applications to improve personal productivity, optimising software functions for specific purposes - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP386 Undertake digital proofing	ICPPP386C Undertake digital proofing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP386 Undertake digital proofing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- transfer underlying skills of proofing across the design and pre-press sectors
- identify the substrate for reproduction and ensure quality of image is suitable for the printing process
- produce image file(s) compatible with a Raster Image Processor (RIP) including an example with special colours
- produce proofs to job specifications and client submission using quality control devices and colour evaluation charts.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify types of digital colour proofing systems
- describe method of producing the colour image and
- variations that may occur when different imaging methods are used

Production of colour proofs

- explain the procedure for outputting the image and production of a colour proof, i.e. transfer of files and use of specific assembly software
- list constraints on file structure imposed by RIP
- describe the function of an International Colour Consortium (ICC) profile
- list differences that various RIPs can have on output

Use of quality control devices for colour appraisal

- describe how a densitometer is used for proof evaluation
- explain the function of calibration software for the output device
- explain the purpose of colour evaluation charts and how they are used

Evaluation of the proof

- list criteria for evaluating a colour proof
- explain differences that can occur between preliminary proofs and a contract proof
- Information sources
- identify manuals, safety and other documentation relevant to this task, their location; and describe the information included
- identify other available sources of information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP396 Generate high-end PDF files

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to generate a high-end Portable Document Format (PDF) file.

It applies to individuals required to check, set and create high-end PDF files ready to be sent to an imaging centre. Individuals respond to clearly defined briefs and work under limited supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPPRP284	Produce PDF files for online or screen display

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Check file	1.1 Document is checked to ensure correct layout file and that all elements are printable

ELEMENT	PERFORMANCE CRITERIA
	1.2 Scanned images are checked for correct resolution and electronic font modification is avoided 1.3 Images requiring cropping and compression are edited in an image editing environment to maintain quality of image 1.4 Tint areas are checked to ensure correct percentage for printing 1.5 Unnecessary elements and blank pages are deleted if not required 1.6 Bleed allowance is incorporated in margins and borders
2 Set PDF Distiller	2.1 Correct paper size is set and fonts are chosen and embedded to meet quality print requirements under copyright regulations 2.2 Appropriate PDF standard is established and selected 2.3 All job options, compression, colour management, colour separation and font options are selected and checked according to requirements of the data recipient 2.4 Process colour separations or spot colour jobs are checked and any problems resolved 2.5 Job ticket is set up according to enterprise procedures, if required 2.6 Advanced job options are selected depending on compatibility and system requirements 2.7 Job options set is named and saved to the correct folder
3 Create PDF	3.1 Printer description file or postscript language file is created and all relevant options are selected, or export file settings selected 3.2 Saved postscript file is opened and job option file is opened through the Distiller as required 3.3 Distiller/PDF export options are checked and set so they do not override the postscript file preferences 3.4 File is distilled and, when processing is finished, opened to view 3.5 File is printed to postscript device and quality of all elements are checked 3.6 Changes to the file are made in the layout program and pages inserted into multiple page documents 3.7 Additional files are converted or exported using the saved job option set

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.3	- Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications - Proofreads texts to check for accuracy
Writing	2.5	Completes workplace forms accurately and legibly using correct technical and enterprise specific vocabulary
Numeracy	1.6	Performs calculations necessary to determine bleed allowances in pages and borders
Navigate the world of work	2.1, 2.5	Follows legislative requirements and organisational policies and procedures relevant to own role
Interact with others	2.3	Uses appropriate communication protocols and conventions to confirm or clarify recipient requirements
Get the work done	1.1-1.6, 2.1-2.7, 3.1-3.7	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency and uses analytical processes to decide on a course of action - Plans, identifies and assembles resources required to complete tasks - Responds to predictable problems and implements standard or logical solutions - Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to create, edit and save files in required format - Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP396 Generate high-end PDF files	ICPPP396A Generate high-end PDF files	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP396 Generate high-end PDF files

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare a high-end Portable Document Format (PDF) file for pre-press
- locate and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline work health and safety (WHS) standards that relate to working for periods of time on computers
- identify PDF printer driver options
- list driver types and preferred application
- explain suitability of a PDF writer for high-end printing
- describe true base 13 fonts

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP397 Transfer digital files

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge needed to manipulate, delete and transfer digital files.

It requires the individual to accept, document, name, delete, archive and transfer digital files by using enterprise relevant processes. Individuals work under limited supervision and with defined procedures.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Save digital files	1.1 Files are named using enterprise format 1.2 File is checked for use of appropriate formats required for enterprise processing 1.3 Version control is used to ensure most recent file can be accessed
2 Transfer digital files	2.1 Files to be transferred (sent or received) are selected and the

ELEMENT	PERFORMANCE CRITERIA
	correct method of transfer is chosen 2.2 Locations where files are to be saved or downloaded are accurately located and navigated 2.3 Files are transferred to required location for processing 2.4 Transferred (sent or received) files are checked to ensure correct transfer has occurred 2.5 Files are documented, moved, renamed, copied, archived and deleted as necessary according to enterprise standards
3 Retrieve and manage digital files	3.1 Required files are retrieved and opened from digital file system 3.2 Computer search functions are used to locate and retrieve files 3.3 File is sent to required location
4 Archive digital files	4.1 Archive system is created according to enterprise protocol 4.2 Consistent, regular backup strategies are undertaken to allow for retrieval of files if there is a data loss event 4.3 Files are retrieved from archive system

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 2.5, 3.2, 4.3	Recognises and interprets texts from a range of sources
Writing	1.1, 1.3, 2.5, 4.1	Chooses appropriate text type to document relevant information
Navigate the world of work	1.1, 1.2, 4.1	Interprets and follows organisational policies and procedures relevant to own role
Get the work done	1.2, 1.3, 2.1-2.5, 3.1-3.3, 4.1-4.3	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency and uses analytical processes to decide on a course of action - Plans, identifies and assembles resources required to complete tasks

		• Responds to predictable problems and implements standard or logical solutions • Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to create and save files in required format

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP397 Transfer digital files	ICPPP397A Transfer digital files	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP397 Transfer digital files

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- manipulate, delete and transfer digital files by using enterprise-determined protocols
- locate and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- name enterprise file format standards
- explain differences in storage media, specifically:
 - optical
 - flash
 - magnetic
- explain file transfer protocols for:
 - Universal Serial Bus (USB)
 - FireWire
 - Asymmetric Digital Subscriber Line (ADSL) wireless
 - email attachment
 - ethernet
- outline file compression methods and explain the effect on file type required for enterprise processing
- identify file formats and sizes, and their effect on Random Access Memory (RAM) requirements, storage, processing and transfer protocols
- describe work health and safety (WHS) standards that relate to working for periods of time on computers.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP411 Undertake a complex design brief

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce advanced graphic design from negotiated design briefs to production of complex finished artwork.

It applies to individuals who work in the graphic pre-press sector of the printing and graphic arts industry. They may take responsibility for production flow and provide leadership to others to ensure completion of the brief.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPPRP311	Develop a detailed design concept.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Negotiate a complex design contract	1.1 Communication with client results in development of a complex design brief, and client agreement is secured

ELEMENT	PERFORMANCE CRITERIA
	1.2 Job analysis and research are undertaken to source cost-efficient design production procedures 1.3 Possible design options are analysed to meet optional printing processes and substrates 1.4 Individual design stages of brief are timed and costed to determine accurate parameters of cost 1.5 Quotation is prepared using accurate estimates to communicate fees required to undertake brief to client 1.6 Client approval to proceed is obtained
2 Plan design process	2.1 Appropriate production processes are planned and scheduled to meet brief specifications for the printing substrate 2.2 Materials are sourced and ordered to conform to brief requirements 2.3 Design team members are briefed and work roles allocated to keep design process organised and on time
3 Render a complex graphic design	3.1 Complex graphic design concept is rendered electronically or manually to conform to the brief 3.2 Adjustments or recommendations are made to enhance the design according to brief in consultation with client 3.3 Production processes of the design concept for colour, production run, substrates and costs are assessed according to requirements of the brief 3.4 Specifications for reproducing the finished artwork are annotated to define specified printing processes and substrates
4 Ensure feasibility of production	4.1 Type options are checked to meet specified printing processes and substrates 4.2 Reproduction feasibility of multiple colour vignettes is analysed to meet specified printing processes and substrates 4.3 Line and tone are combined and dot complexity of photography is analysed to meet specified printing processes and substrates 4.4 Feasibility of complex imposition and folds are calculated to meet specified printing processes and substrates 4.5 Foils and embossing are checked to meet specified printing processes and substrates
5 Solve technical problems	5.1 Materials and/or format are reviewed to ensure most suitable are selected to prevent design and production problems

ELEMENT	PERFORMANCE CRITERIA
	5.2 Technical problems are resolved by re-design or amendment of the brief in consultation with client to acceptable standards
6 Ensure quality output	6.1 Standards for reproduction are documented to form a reference bank for the design process 6.2 Design solutions are filed and stored ready for retrieval according to enterprise procedures 6.3 Internal performance standards are evaluated to identify potential reforms for future enterprise procedures 6.4 Future actions are determined to incorporate accurate cost and time analyses into future briefs

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 2.1, 2.2, 3.1-3.4	Recognises, interprets and evaluates information from range of sources to establish job requirements
Writing	1.1, 1.5, 1.6, 3.4, 5.2, 6.1	Writes technical/design briefs or complex work instructions based on client and stakeholder requirements
Oral Communication	1.1, 1.5, 1.6, 2.3, 3.2, 5.2	- Uses appropriate vocabulary, including technical language relevant to role and context in team briefings - Participates effectively in spoken interactions with clients to confirm or clarify understanding
Numeracy	1.4, 1.5, 4.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	6.1-6.3	Follows organisational policies and procedures relevant to own role
Interact with others	1.1, 1.5, 1.6, 2.3, 3.2, 5.2	- Uses appropriate communication protocols and conventions to confirm or clarify client requirements - Shares knowledge, experience information and resources with others as an integral part of work relationships
Get the work	1.1-1.3, 1.5, 2.1, 2.2, 3.1-3.4, 4.1-4.5, 5.1,	Sequences and schedules complex activities, monitors implementation and manages relevant communication

done	5.2, 6.1-6.4	- Plans, identifies and assembles resources required to complete tasks - Analyses benefits, costs, risks and feasibility from a broad range of perspectives, and may think laterally to redesign aspects to address potential issues - Responds to predictable problems and implements standard or logical solutions - Draws on a broad understanding of context, and uses a combination of analysis and intuition to decide whether an idea is feasible - Reflects on outcomes of decisions to identify changes to improve future outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP411 Undertake a complex design brief	ICPPP411C Undertake a complex design brief	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP411 Undertake a complex design brief

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop a clear design brief by agreement, and prepare a quotation
- produce a complex design which meets reproduction and client requirements
- produce finished art from complex design briefs that use different printing processes
- provide evidence that each stage, from initial negotiation of the brief to final print production, has been carried out satisfactorily.
- use computer hardware and software to produce concepts and pre-press artwork.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe how design requirements influence selection of THREE printing processes, operations or electronic media
- explain how design factors influence cost of printed job
- identify how printing substrates are selected and affects inks and printing substrates have on design
- explain how colour and typeface selection impact design
- explain how colour breakdown and sequence is managed in print to meet production and budget requirements
- identify how substandard or unsuitable artwork from external sources affects print quality and how faulty artwork is rectified
- describe common technical problems when a design is printed and how they are resolved, such as image on double page spread or finger marks on dark solids
- describe procedures for special effects printing
- explain how artwork is matched to customer's specifications as outlined on the job sheet

- list manuals, safety and other documentation relevant to this task, and where they are kept, and what sort of information is included
- list other sources of available information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP421 Compose and evaluate typography

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake advanced typesetting and typography involving contingencies and problem-solving beyond routine requirements.

It applies to individuals who compose type, and manage storage and retrieval in the graphic pre-press sector of the printing and graphic arts industry. The individual works independently and is able to cope with the unexpected challenges related to the job.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPPRP221	Select and apply type

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Compose type	1.1 Type is composed according to job specifications 1.2 Allowance is made for type run-arounds, stipples, spot colour

ELEMENT	PERFORMANCE CRITERIA
	and complex shapes 1.3 Kerning is applied to type according to job specifications
2 Solve typographic technical problems	2.1 Capabilities of equipment to produce type are assessed correctly 2.2 Technical problems relevant to colour and reproduction of type are resolved by re-evaluation of typographic elements or amendment of the brief in consultation with client
3 Ensure quality of typographic output	3.1 Finished typography is checked for conformance to client specifications, including correct grammar and punctuation, and printing requirements 3.2 Quality of typographic reproduction is monitored to ensure required standards of output
4 Manage type system	4.1 Electronic type system is managed to facilitate storage, retrieval and outputting of data 4.2 Type software and fonts have current user licences that allow type to be used for the job 4.3 Type software and files are stored in appropriate locations for future access

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 2.2, 3.1	- Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications - Checks texts for compliance with punctuation and grammatical conventions
Oral Communication	2.2	Participates effectively in spoken interactions with clients to confirm or clarify understanding
Numeracy	1.1	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	4.2	Understands and complies with legislative requirements and follows organisational policies and

		procedures
Interact with others	2.2	• Uses appropriate communication protocols and conventions to confirm or clarify client requirements
Get the work done	1.1-1.3, 2.1, 2.2, 3.1, 3.2, 4.1, 4.3	• Takes responsibility for planning and organising own workload and assembles required resources • Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts • Uses a range of digitally based technology and applications to access and filter data, extract, organise, integrate and share relevant information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP421 Compose and evaluate typography	ICPPP421C Compose and evaluate typography	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP421 Compose and evaluate typography

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce and evaluate TWO complex typographic jobs
- compose type using overlays, tints and kerning to meet specifications
- resolve any technical problems to ensure type reproduction meets quality standards defined in job specifications
- identify substrate for reproduction and the printing process in the typographic solutions

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list typographic considerations that must be taken into account when making typeface selections for various printing processes or electronic media
- describe effects that type alignment and justification have on a job
- describe how dynamic design layouts affect type selection
- define the difference between text point size and display point size
- define basic classifications of text typefaces
- list problems of using fine type in reverse print
- describe typographic principles to consider when stippling type
- describe colour considerations when using text type
- list references utilised to evaluate if appropriate grammar and punctuation has been used in this job
- list manuals, safety and other documentation relevant to this task, where they are kept, and the information in them
- list other sources of available information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP422 Digitise complex images for reproduction

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake advanced, complex colour scanning or digital capture.

It applies to individuals who work in the graphic pre-press sector of the printing and graphic arts industry. They are responsible for image production that meets the technical specifications of the job.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Mount and prepare original copy	1.1 Copy is mounted and positioned according to scanner/artwork specifications 1.2 Crops are marked to minimise use of disk space 1.3 Multiple copy units are correctly identified and assigned according to technical specifications
2 Set up and adjust scanner	2.1 Scanner is calibrated and program set according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	2.2 Colourcast and catch lights are assessed to ensure image is scanned according to job specifications 2.3 Adjustments are made to tone and colour correction requirements 2.4 End points are set 2.5 Scanner settings are utilised to achieve required results for varied print processes
3 Produce and evaluate complex images	3.1 Images are scanned using appropriate software commands and scanner controls 3.2 Scanned images are evaluated for colour and grey balance, tone reproduction, cast removal and end-point accuracy 3.3 Images are stored on file and displayed on a monitor or output device according to job specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 2.1, 2.2, 3.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Get the work done	1.1-1.3, 2.1-2.5, 3.1-3.3	- Takes responsibility for planning and organising own workload using analytical processes to decide a course of action, and assembles required resources - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Utilises a broad range of digital software features for specific purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP422 Digitise complex images for reproduction	ICPPP422C Digitise complex images for reproduction	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP422 Digitise complex images for reproduction

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely use a medium to high-end full colour scanner (with full software capabilities) to reproduce at least TWO colour continuous tone originals with different contrast characteristics and ONE rescreen
- provide high-quality colour, grey balance, tone reproduction and cast removal in scanned images
- match technical aspects of scanned image to selected printing process and substrate
- safely operate and monitor production on a flat-bed or drum scanner with full colour capabilities
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain why scanner settings need to be varied to suit subsequent printing processes or electronic output
- list factors that influence selection of highlight and shadow aim points
- describe critical qualities of a copy that need evaluation prior to reproduction
- explain main points to be considered when preparing a copy for scanning
- describe how grey balance requirements are determined prior to applying colour correction
- describe factors that determine requirement for colour correction
- describe purpose of catchlight controls and how they are applied
- describe considerations necessary to ensure predictability and repeatability at the output stage

- list methods of storage and filing of images for retrieval
- explain criteria used for evaluating scanned images
- explain how common file formats relate to the scan saving process
- identify other file formats available for saving scans and when they are used
- identify manuals, safety and other documentation relevant to this task and where are they kept, and information included in them
- identify other sources of available information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to:

- a flat-bed or drum scanner with full colour capabilities
- industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP423 Apply colour to design brief

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to effectively apply colour to enhance artwork and meet the requirements of a design brief.

It applies to individuals who work in the graphic pre-press sector of the printing and graphic arts industry.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare colour options	1.1 Colour requirements of the brief are identified and clarified if necessary 1.2 Effectiveness of different colour schemes used previously by self and others are compared to influence current artwork 1.3 Colour tools are used to inform choice of colours 1.4 Overall colour composition is developed, taking into account target audience, balance and relationships
2 Apply colour to artwork	2.1 Colours are applied to artwork according to brief specifications

ELEMENT	PERFORMANCE CRITERIA
	2.2 Colour and objects are appraised to ensure overall balance and emphasis, and adjustments made as required 2.3 Any halftones are matched with similar colours according to brief specifications 2.4 Overall artwork is appraised to ensure best possible colour options are used, given the brief and other elements of the artwork, and changes are made if necessary 2.5 Artwork samples that effectively meet the brief are produced 2.6 Artwork is saved and prepared for presentation to client

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 2.3-2.5	Recognises and interprets information contained in a range of texts to establish job requirements
Oral Communication	1.1	Participates effectively in spoken interactions with others to confirm or clarify understanding
Numeracy	2.2	Uses percentages and proportions to adjust colour balance to achieve desired results
Get the work done	1.2-1.4, 2.1-2.6	- Takes responsibility for planning and organising own workload and assembles required resources - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Evaluates outcomes of design decisions to identify improvement opportunities - Utilises a broad range of features within applications optimising software functions for specific purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP423 Apply colour to design brief	ICPPP423C Apply colour to design brief	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP423 Apply colour to design brief

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce artwork with a sophisticated use of colour demonstrating a fundamental understanding of colour theory
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain reducing colour for compression process
- describe influence of target audience responses to colour
- describe colour attributes and their application to design briefs
- identify browser safe colours
- list colour models applied to design briefs.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP430 Manage colour

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manage colour in pre-press operations to ensure proofs, monitors and final products match.

It applies to individuals who work in the graphic pre-press sector of the printing and graphic arts industry.

They may also take responsibility for production flow and provide leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Identify colour requirements	1.1 Printing conditions are determined to identify colour management requirements 1.2 Printer's requirements are established to guide provision and use of International Colour Consortium (ICC) colour profiles

ELEMENT	PERFORMANCE CRITERIA
2 Fingerprint press if printing in a controlled environment	2.1 Suitable test charts are selected 2.2 Test chart is printed with standard ink densities on a range of stock, including non-standard types such as yellow parchment 2.3 Densitometer and/or spectrophotometer is used to examine printed test charts and generate colour profile for that press and that stock
3 Calibrate digital proofing device	3.1 Proofer is linearised for required stock 3.2 Digital test file (eg. IT8 chart) is produced 3.3 Test file is printed on a proofing device and on the type of press that will be used to obtain a proof for both film and direct-to-plate technologies 3.4 Results are measured with a spectrophotometer 3.5 Results are used to generate output profile that allows for dot gain, Grey Component Replacement (GCR), Under Colour Removal (UCR), total gradients and black values
4 Create different monitor profiles using colour tuning package	4.1 A densitometer with screen suction device, if available, and/or appropriate software (OR) are used 4.2 Contrast (white level) and brightness are set 4.3 Red, Green, Blue (RGB) and Cyan, Magenta, Yellow, Key/black (CMYK) and ICC profiles are applied 4.4 Jobs on screen are viewed through appropriate profiles
5 Calibrate scanner	5.1 Test chart (eg. IT8) is loaded 5.2 Scanner input profiling software is used to calibrate scanner (OR) 5.3 All settings are put to zero (0) 5.4 Test chart is scanned and digital proof is outputted 5.5 Spectrophotometer is used to measure proof and ICC profile is generated and loaded into scanning software
6 Calibrate digital camera	6.1 Standard lighting conditions are set up 6.2 ICC target is photographed and digital proof is outputted 6.3 Spectrophotometer is used to measure proof and ICC profile as generated 6.4 ICC profile is loaded into digital camera software
7 Carry out maintenance	7.1 Whole system is checked every two to three months

ELEMENT	PERFORMANCE CRITERIA
	7.2 Monitor calibrations are checked monthly 7.3 Digital proofing devices are checked at least every time ink or paper stock is changed
8 Use colour profiles	8.1 Appropriate profiles are used to ensure colour on monitors, proofs and final product match as closely as possible 8.2 In a controlled environment press fingerprint for final output is used, otherwise digital proofer profile is used 8.3 Colour wedges are included in all files and outputs

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.3, 3.4, 3.5, 4.1, 4.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures
Numeracy	2.3, 3.4, 3.5, 4.2, 5.2, 5.3, 5.5, 6.3, 7.1, 7.2	- Uses technological devices to measure and record data and act on results/performance - Interprets numerical measurements of specialised equipment
Interact with others	1.2	Uses appropriate communication protocols and conventions to confirm or clarify printer requirements
Get the work done	1.1, 1.2, 2.1-2.3, 3.1-3.5, 4.1-4.4, 5.1-5.5, 6.1-6.4, 7.1-7.3, 8.1-8.3	- Takes responsibility for planning and organising own workload and assembles required resources - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Analyses results from technical instruments and test samples to diagnose problems or ensure satisfactory completion - Understands purposes, specific functions and key features of complex digital systems and tools and analyses multiple sources of information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP430 Manage colour	ICPPP430C Manage colour	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP430 Manage colour

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- manage colour in pre-press operations to ensure proofs, monitors and final products match
- find and use information relevant to the task from a variety of information sources
- produce a portfolio of THREE jobs that demonstrates and provides evidence of:
 - final product printed on various stocks and matching digital proofs on simulated stock
 - monitors are checked to ensure they have different loaded profiles that match the portfolio jobs
 - colour management system maintenance procedures.

Note: If a specific volume or frequency is not stated, then evidence

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe WHS issues encountered during colour management for pre-press

Light

- describe how light intensity and colour temperature are measured
- identify standard lighting conditions for matching colour
- list effects different lighting conditions have on: using a monitor, proofing and printing

Colour theory

- describe the difference between Red, Green, Blue (RGB) and Cyan, Magenta, Yellow, Key/black (CMYK) colour
- explain Under Colour Removal (UCR) theory and the effect it has on an image
- explain Grey Component Replacement (GCR) theory and the effect it has on an image

Densitometry and spectrophotometry

- explain densitometry and spectrophotometry measurement
- describe use of International Colour Consortium (ICC) profiles and how they affect output

Scanning theory

- list factors that influence selection of highlight and shadow aim points
- explain why grey balance requirements are determined prior to applying colour correction, and how they are determined
- list factors that determine colour correction requirements

Printing process

- explain why different ink densities are used for different stocks
- describe standard ink densities for different types of jobs
- list affects different stocks have on colour reproduction
- list affects different inks have on colour reproduction for proofing and final production
- describe affects age and configuration of the press (eg. 2-colour vs. 4-colour) have on colour reproduction
- define dot gain and how it affects colour
- explain why final output is affected by the type of press and printing process used
- describe strengths and limitations of different printing processes in colour reproduction

Problem solving

- describe common colour management problems and appropriate solutions
- explain when an ICC profile is included in a Portable Document Format (PDF) file
- describe how using the wrong profile affects output

Information sources

- identify sources of information about colour management.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP435 Generate complex imposition

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake complex electronic imposition.

It applies to individuals who work in the graphic pre-press sector of the printing and graphic arts industry. The individual takes responsibility for meeting job specifications with a minimum delay in workflow.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Impose images electronically	1.1 Industry designated software is applied to imposition of images according to job specifications 1.2 Imposition options are reviewed to ensure best fit for final substrate size 1.3 Trapping variables are taken into account 1.4 Particularities of press are considered
2 Solve technical	2.1 Technical problems relevant to imposition are considered in

ELEMENT	PERFORMANCE CRITERIA
problems of imposition	imposition scheme 2.2 A lay-down sheet is prepared according to cutting and creasing and folding requirements 2.3 Binding and finishing requirements are considered according to job specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.3	Recognises and interprets text to establish job requirements from information contained in specifications
Numeracy	1.1, 1.2, 2.2	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Get the work done	1.1-1.4, 2.1, 2.2	- Takes responsibility for planning and organising own workload and assembles required resources - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Ensures technical and production issues are taken into account in decision-making - Utilises a broad range of features within applications, optimising software functions for specific purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP435 Generate complex imposition	ICPPP435C Generate complex imposition	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP435 Generate complex imposition

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce TWO complex impositions that best meet job specifications including identification of printing process, substrate surface and size
- transfer the underlying skill of solving complex technical problems of imposition across the design and pre-press sectors to conform to brief specifications

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify using examples of how subsequent printing processes or electronic output affect imposition

Purpose of imposition marks principles of imposition

- describe the difference between saddle stitch and perfect binding
- explain the purpose of head margins
- explain the difference between sheetwise and work and turn

Preparation of data

- explain trapping requirements that apply to specific jobs
- list considerations when saving a PostScript file
- name requirements of an imposition set up document

Use of imposition program

- describe installation of fold and cut marks
- explain how creep settings are nominated
- explain creep and bottling

Output techniques

- explain the need for a server signature to be available to the output station
- identify the technique used to verify pictures and fonts are available
- explain the purpose of a mock-up

Information sources

- identify manuals, safety and other documentation relevant to this task, their location and the information included in them
- identify other sources of available information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP452 Output complex images direct to plate or press

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to output complex images direct to plate or direct to press.

It requires the individual to set up and calibrate the output device, align, adjust and manipulate files, and output error-free data to plate or press according to the press and job requirements.

It applies to individuals who produce complex images for both plate and digital printing press and who work in the printing or graphic arts industries. Individuals generally work within defined procedures, respond to clearly defined briefs, and work under limited supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPPRP352	Output complex images

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the</i>	<i>Performance criteria describe the performance needed to</i>

ELEMENT	PERFORMANCE CRITERIA
<i>essential outcomes.</i>	<i>demonstrate achievement of the element.</i>
1 Set up and maintain output device	1.1 Output device is set up to manufacturer's specifications and enterprise standards 1.2 Output device is calibrated for profiles, stock and ink types through use of calibration pages and densitometry 1.3 Calibration is evaluated regularly and necessary adjustments are made to output device
2 Adjust and manipulate images/files	2.1 Files on electronic media are evaluated as to suitability for output 2.2 Appropriate output resolution and data are set 2.3 Appropriate screen angle and dot type are set according to job specifications 2.4 Colour profiles appropriate to the job specifications are applied as required 2.5 Availability of high resolution images for Open Prepress Interface (OPI) process is assessed 2.6 Appropriate fonts are made available 2.7 All support files are included with the job
3 Output image	3.1 File is prepared for output to plate setter or digital printing press using industry designated software 3.2 If outputting to plate, plate material is selected according to press requirements and job specifications 3.3 If outputting to plate, plate size is selected according to press requirements 3.4 Image is positioned on plate/press with correct orientation for grip 3.5 Job queuing is managed to ensure efficient production 3.6 Images are outputted to appropriate medium 3.7 Output is processed according to job specifications
4 Evaluate result	4.1 Output is checked for correct dot size and screen angles 4.2 Image elements are checked according to original job specifications 4.3 Technical problems are solved and appropriate corrections are made 4.4 Job is prepared for next stage of production (eg. plates are

ELEMENT	PERFORMANCE CRITERIA
	processed)

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.3, 2.4, 3.2, 3.7, 4.2	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Numeracy	1.2, 2.4, 3.3	Uses mathematical processes to calibrate equipment for file formats and outputs
Navigate the world of work	1.1	Understands and follows policies and procedures associated with own role
Get the work done	1.1-1.3, 2.1-2.7, 3.1-3.7, 4.1-4.4	- Takes responsibility for planning and organising own workload and assembles required resources - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Utilises a broad range of features within applications, optimising software functions for specific purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP452 Output complex images direct to plate or press	ICPPP452C Output complex images direct to plate or press	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP452 Output complex images direct to plate or press

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- output TWO complex images direct to plate or press, and proof and check to ensure press requirements and job specifications are met
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe how printing process selection impacts output settings
- outline methods/procedures available for calibrating an output device
- list consequences of incorrect calibration
- explain how differences in stock affect calibration
- state how often calibration should be checked
- explain how to rectify files that do not transfer correctly
- list main points to be checked before sending a job to the Raster Image Processor (RIP)
- explain the relationship between screen ruling and selection of image resolution
- identify conditions that cause a variation from conventional screen angles
- outline checks needed while preparing a job for Open Prepress Interface (OPI)
- outline consequences for image quality if OPI files are not placed in their correct folders
- explain what the low resolution file does in the OPI process
- list main factors influencing processing speed of a job when being RIPped
- explain how RIPping speed of a job can be increased
- name setting changes required to the output device/software when outputting a Frequency Modulation (FM) screen

- outline factors that influence selection of the screen micron rating
- list main file formats and effects selection of a format has on processing of a job
- identify manuals, safety and other documentation relevant to this task, where they are kept, and information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP481 Design complex carton

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to design cartons for which no templates exist.

It requires the individual to design an original complex carton that meets job specifications and substrate characteristics, and then produce an accurate prototype.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Assess brief requirements	1.1 Discuss brief with client to ensure requirements are understood 1.2 Check that all relevant information is in the brief, i.e. end use, dimensions and product characteristics
2 Design carton to suit brief requirements	2.1 Determine appropriate carton style, size, material and calliper to meet the client brief 2.2 Use scanners or digitisers to import design material into computer program 2.3 Draw design using computer program

ELEMENT	PERFORMANCE CRITERIA
	2.4 Set height, width and depth and gluing flap dimensions to meet requirements of the client brief 2.5 Requirements for knife setting, stripping and gluing in production are checked and position is designed so grain direction is correct and use of material is maximised
3 Use plotter to cut sample	3.1 Output device (e.g. plotter) is set up ready for downloading design 3.2 Cutting and creasing depths are set 3.3 Calliper of material is checked 3.4 Material is positioned correctly 3.5 Output device is operated safely according to manufacturer's specifications and enterprise procedures 3.6 Routine machine maintenance is carried out
4 Assemble sample	4.1 Sample is cut by hand adopting safe practices 4.2 Cut sample is folded and glued by hand ensuring angles and construction are correct
5 Check and adjust design	5.1 Sample is checked for conformance to the client brief 5.2 Design is adjusted if necessary to meet job specifications
6 Output design	6.1 Design is saved ready for downloading to forme cutter 6.2 Design is outputted as keyline for artwork or as film, as required 6.3 Relevant paperwork is completed

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 2.4, 3.5, 5.1, 5.2	Recognises and interprets text to establish job requirements from information contained in procedures and specifications
Writing	6.3	Completes workplace forms accurately and legibly using correct technical and enterprise-specific vocabulary

Oral Communication	1.1	Participates effectively in spoken interactions with clients to confirm or clarify requirements
Numeracy	2.4, 2.5, 3.2, 3.3, 4.2	Calculates sizes, callipers and efficient use of materials
Navigate the world of work	3.5	Understands and complies with legislative requirements associated with own role
Interact with others	1.1	Uses appropriate communication protocols and conventions to confirm or clarify client requirements
Get the work done	2.1-2.5, 3.1-3.4, 3.6, 4.1, 4.2, 5.2, 6.1, 6.2	- Takes responsibility for planning and organising own workload and assembles required resources - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Utilises a broad range of features within applications, optimising software functions for specific purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP481 Design complex carton	ICPPP481C Design complex carton	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP481 Design complex carton

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce TWO different complex carton designs which accurately meet the client brief and substrate characteristics
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline health and safety concerns when using computers, plotters and scanners
- explain effect of board grain and calliper on carton design
- outline correct use of a micrometer
- explain how appropriate board for a product is selected
- explain how scuff, heat and moisture resistance are determined
- explain effect inks and sealants have on board characteristics and selection
- name computer programs for carton design
- outline checks to perform when programming a new design on the computer system
- discuss uses and limitations of digitisers and scanners
- outline checks to perform when using digitisers and scanners
- identify types of products cartons are used for
- explain how to determine if a design is appropriate for its end use
- explain how refrigeration affects design and materials
- list aspects of product sizing and tolerances that should be rechecked
- explain how tolerances are set in a design
- explain how stability in a display carton is ensured
- explain how to determine appropriate strength, size and placing of glue lines and nips

- identify carton designs suitable for machine packing
- identify carton designs suitable for hand packing
- outline constraints on design and positioning on the forme caused by knife making and production
- explain how manufacturing requirements of cutting and gluing affect carton design
- explain how appropriate angles and cornering of flaps are determined
- list main features of, and differences between, different graphic design software programs that need to be considered when outputting carton designs
- outline ways to ensure output is appropriate for the graphic design software used by the customer
- identify manuals, safety and other documentation relevant to this task, where they are kept, and information included in them
- identify other sources of available information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP484 Set up and operate automated workflow

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set up and operate an automated workflow to produce a print-ready file.

It requires the individual to set up and operate an automated workflow to produce a print-ready file.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Check job files and perform pre-flight	1.1 All details required for the job are checked and confirmed against job specifications 1.2 Files are loaded and all file resources are checked to determine if file is ready for production 1.3 File format is identified and best method of submission is chosen 1.4 Missing fonts are, where available, embedded and image data optimised, cropped and/or compressed, if necessary 1.5 Hairlines are thickened to a minimum width, if necessary

ELEMENT	PERFORMANCE CRITERIA
	1.6 Layout images are assigned as high resolution data and down sampled 1.7 Thumbnails are generated for viewing pages
2 Create portable job ticket format processors	2.1 Parameters for individual elements or steps for all phases of the job are defined 2.2 All job phases are sequenced according to workflow and enterprise processes 2.3 If necessary, access levels are set for operators 2.4 Workflow definition is reviewed and saved
3 Transform colours	3.1 Assigned colour libraries are checked for consistency and colour names are converted if inconsistency is present 3.2 Spot colours are converted to process colours where necessary 3.3 Output colours are matched to colours input using selected International Colour Consortium (ICC) profile 3.4 Colours are set for final proof output
4 Set trapping parameters	4.1 Portable job ticket format trapping settings are used and additional trapping requirements added where appropriate 4.2 Traps are viewed and checked in file 4.3 If necessary traps are edited, removed or replaced 4.4 An appropriate separation-capable proof is viewed to ensure separations will output as expected
5 Proof pages	5.1 Imposition plan is assigned to the job 5.2 Form proof from plotter is printed containing all printer marks, and signature marks are viewed for final checking 5.3 Pages are outputted on a page proofer and checked 5.4 Any required changes are made and proof is approved by client
6 Prepare for output	6.1 Jobs to be imaged are outputted to film or plate 6.2 CIP3/CIP4 data is captured and dealt with according to enterprise procedures 6.3 Information for presetting of cutting and folding machines is generated if required and plug-ins are available 6.4 Print Production Format files are exported to or saved for the print console and outputted for plate or film imaging 6.5 Job data is saved and archived as required

ELEMENT	PERFORMANCE CRITERIA
	6.6 Documentation is signed-off according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.4, 5.2, 5.3	- Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications - Checks texts for accuracy
Writing	2.1, 2.4, 6.6	Completes workplace documents accurately and legibly using correct technical and enterprise-specific vocabulary
Oral Communication	5.4	Participates effectively in spoken interactions with clients to confirm or clarify understanding
Navigate the world of work	2.2, 6.2, 6.5, 6.6	Follows organisational policies and procedures relevant to own role
Interact with others	5.4	Uses appropriate communication protocols and conventions to gain client approval
Get the work done	1.2-1.7, 2.1, 2.2, 2.4, 3.1-3.4, 4.1-4.4, 5.1-5.4, 6.1-6.5	- Takes responsibility for planning and organising own workload and assembles required resources - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Utilises a broad range of features within applications, optimising software functions for specific purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP484 Set up and operate	ICPPP484C Set up and operate	Updated to meet Standards for	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
automated workflow	automated workflow	Training Packages	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP484 Set up and operate automated workflow

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up and operate an automated workflow to produce TWO different print-ready files according to the client brief and performance criteria
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list and describe the file resources to check during pre-flight
- explain why different submission methods would be chosen for different file formats
- explain why and when it might be important to change hairline effects
- outline the enterprise process for sequencing all phases of a job
- outline the importance of the colour space
- define trapping
- explain how to check that separations will output correctly
- outline the enterprise procedures for dealing with CIP3/CIP4 data.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP485 Develop a digital data template

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to document content and structure for digital print equipment.

It requires the individual to identify data requirements, content and structure of a digital template for variable digital printing.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPPRP385	Operate a database for digital printing.

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Identify content requirements	1.1 Data purpose is identified from job requirements and clarified with client 1.2 Data file format and type of database are identified

ELEMENT	PERFORMANCE CRITERIA
	1.3 Layout is determined from job requirements and confirmed with client 1.4 Static and variable areas are identified according to job specifications 1.5 Accuracy of data is confirmed and signed off as such by client 1.6 Requirement for additional software integration is determined, such as postal software
2 Develop template	2.1 Fields are created and named consistently to reduce errors 2.2 Copy holes and data are marked-up to match job specifications 2.3 Report for the printer is developed which identifies relevant data assigned to each copy hole according to job specifications and business rules 2.4 Copy holes are assigned and related information documented for printer to understand the connection to the data 2.5 Correct number of fields is available for the job 2.6 Template is signed off as suitable by client
3 Finalise and test template	3.1 Business rules are tested and if possible a soft proof is reviewed 3.2 Final document is viewed with a markup language parser 3.3 Spot colours are converted to process colours where necessary 3.4 Template is well-formed, error-free and meets client needs 3.5 Template is extensible to meet future client needs 3.6 Template is finalised and made ready to send to the press

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.4, 2.2, 2.3	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	2.1, 2.3, 2.4	Completes workplace documents accurately and legibly using correct technical and enterprise-specific

		vocabulary
Oral Communication	1.1, 1.3, 1.5, 2.6	Participates effectively in spoken interactions with clients to confirm or clarify understanding of requirements
Numeracy	2.5	Performs calculations to determine correct number of fields for task
Navigate the world of work	2.3	Recognises and follows organisational policies and associated with own role
Interact with others	1.1, 1.3, 1.5, 2.6	Uses appropriate communication protocols and conventions to clarify requirements or gain client approval
Get the work done	1.2, 1.5, 1.6, 2.1, 2.2, 2.4, 2.5, 3.1-3.3, 3.5, 3.6	- Takes responsibility for planning and organising own workload and assembles required resources - Recognises and takes responsibility for addressing predictable, and some less predictable problems in familiar work contexts - Uses digital tools to access and organise complex data and analyse multiple sources of information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP485 Develop a digital data template	ICPPP485C Develop a digital data template	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP485 Develop a digital data template

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify correct data requirements and develop and mark up the structure of a digital template for variable digital printing that is error-free in the soft proof and meets client requirements, job specifications and performance criteria
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain Standard Generalised Markup Language (SGML) and why it is important
- explain the relationship of SGML to Extensible Markup Language (XML) and Personalised Print Markup Language (PPML)
- outline the difference between SGML, PPML and XML and the use of SGML over XML
- outline the difference between Cascading Style Sheets (CSS) and Extensible Stylesheet Language XSL
- state the intended purpose of XSL
- identify ways an extensible markup language can be used over HyperText Markup Language (HTML), and ways to use both with one set of data
- outline purposes of meta data within markup language documents
- explain why PRISM is important for content publishing
- explain the PPML relationship to XML.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPRP494 Develop document content and structure

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to develop the content meaning and document structure for markup for web page or electronic publishing purposes.

It requires the individual to create documents that have structure, content, readability and design appropriate for an online or print audience.

It applies to individuals who work in the printing and graphic arts industries who are responsible for creating and delivering a document/information to readers as electronic output or for-print format, and who work under limited supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPPRP396	Generate high-end PDF files

Unit Sector

Pre-Press

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the</i>	<i>Performance criteria describe the performance needed to</i>

ELEMENT	PERFORMANCE CRITERIA
<i>essential outcomes.</i>	<i>demonstrate achievement of the element.</i>
1 Identify document requirements	1.1 Content meaning and information structure are developed based on document intent, final media and intended audiences 1.2 Information is identified and grouped according to the job brief 1.3 Target audience requirements and expectations are determined according to the brief
2 Plan content structure	2.1 Information is arranged in related topics and logical sequence 2.2 Content meaning is tested by simulating generation of new coherent documents based on the original content 2.3 A hierarchy of information is developed with data checked to confirm hierarchy sequence
3 Develop information architecture	3.1 An information hierarchy is prepared, catering for physical storage of files 3.2 Search and retrieval mechanisms are prepared for content discovery 3.3 Information hierarchy is designed, catering for navigation and access between files or groups of content
4 Develop navigation system	4.1 High level, local and document navigational systems are built based on information architecture 4.2 Design is consistent, intuitive and with a logical labelling system to provide access to various levels and type of content 4.3 Labels and indexes are clear, consistent, coherent and relatively intuitive to enable target audience access
5 Design information layout	5.1 Templates for textual and graphic elements are developed to facilitate consistent and uniform layout and visual design (technology) 5.2 An extensible template is linked to the document (technology)
6 Test document	6.1 Suite of prototypes for all document levels is developed 6.2 Rigour of information architecture at all levels is tested 6.3 Correct functioning and intuitive use of navigational features are tested for all levels 6.4 Visual design and layout are tested at all levels against standard onscreen design principles 6.5 Levels of accessibility for people with disabilities are deemed acceptable

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.3, 2.1, 2.3, 3.1-3.3, 4.3, 6.4	Recognises and interprets text to establish job requirements from information contained within relevant procedures, specifications and reference material
Navigate the world of work	6.4, 6.5	Recognises and meets organisational and industry requirements associated with own role
Get the work done	1.2, 2.1-2.3, 3.1-3.3, 4.1-4.3, 5.1, 5.2, 6.1-6.5	- Takes responsibility for planning and organising own workload using analytical processes to decide on a course of action - Considers and assembles resources required - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Utilises a broad range of features within applications, optimising software and computer functions for specific purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRP494 Develop document content and structure	ICPPP494C Develop document content and structure	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPRP494 Develop document content and structure

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- create TWO different documents which include evidence of information structures for markup, web pages or long document assembly (documents must be intuitive for target audience navigation, and successfully tested)
- find and use information relevant to the task from a variety of information sources.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify the difference between a data store document and a document layout application
- name meta languages used for multiple audiences
- explain metadata, and in particular Publishing Requirements for Industry Standard Metadata (PRISM)
- explain personalised Print Markup Language (PPML)
- outline principles of document navigation
- explain content conversion and content management
- identify and explain data mapping and content models.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Pre-Press field of work and include access to special purpose tools, equipment and industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPTD301 Manipulate 3D files in preparation for 3D printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 3.0.

Application

This unit describes the skills and knowledge required to assess and rectify errors and convert files to a usable format for three-dimensional (3D) printing.

It applies to individuals in a range of industry sectors who have technical skills in 3D printing technologies and provide 3D printing services to internal or external clients.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Three-Dimensional Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Assess design file	1.1 Receive file and identify and document precision, quality, and materials requirements for 3D file in accordance with client specifications 1.2 Review and document faults, imperfections and errors of file and assess against client specifications 1.3 Provide recommendations to client, and agree on alterations to be undertaken

2. Determine work requirements	2.1 Select software required to perform adjustments according to file requirements 2.2 Calculate and document time and cost of work required to rectify identified faults, imperfections and errors 2.3 Evaluate and document potential waste, build and support materials 2.4 Inform client of work requirements and obtain approval for planned work
3. Prepare a precision 3D print file	3.1 Manipulate file to remove imperfections and errors 3.2 Prepare output file according to printer specifications 3.3 Review file quality with client and obtain sign off 3.4 Save file in a format appropriate for 3D printing according to organisational policies and procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

Skill	Description
Reading	Analyses graphic files and specifications to determine requirements
Writing	Names data files using appropriate naming conventions
Oral communication	Presents complex information using clear and persuasive language, and appropriate tone and pace for the audience and purpose
Numeracy	- Performs mathematical calculations appropriate to graphics software to ensure accuracy, scale and tolerances are being met - Estimates works requirements
Interact with others	Understands what to communicate, with whom and how, in routine work situations
Get the work done	- Accepts responsibility for planning and sequencing complex tasks and workload, negotiating key aspects with client - Uses problem solving techniques to evaluate errors and manipulate graphics images - Uses digital technologies and applications to manage and manipulate data

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPTD301 Manipulate 3D files in preparation for 3D printing	ICPPRP495 Manipulate 3D graphics files in preparation for 3D printing	Updates to elements, performance criteria and assessment requirements	Not equivalent

Links

Companion Volume Implementation Guides are available from VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPTD301 Manipulate 3D files in preparation for 3D printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 3.0.

Performance Evidence

The candidate must demonstrate they can perform the following according to the standards defined in the elements, performance criteria and foundation skills of this unit.

The candidate must demonstrate the ability to manipulate 3D files in accordance with workplace procedures to meet required outcomes a minimum of 2 times. This includes demonstrating the ability to:

- communicate with client to identify needs
- confirm client requirements for three-dimensional (3D) print output
- determine work requirements and obtain client approvals
- recognise faults, imperfections and errors in 3D printer files
- use software to rectify errors in 3D printer files
- save files in required format.
-

Knowledge Evidence

The candidate must be able to demonstrate the following knowledge to effectively complete the tasks outlined in the elements and performance criteria of this unit, and to manage tasks in the context of the work role:

- common manifold errors in 3D printer graphics, including the effect on:
 - proposed printed material
 - printing technology
 - wall thickness
 - file resolution limits
 - conversion between software
 - support structure
- possible errors, including:
 - reversed surfaces
 - components without volume

- internal edge and face errors
- the relationship between 3D modelling software and 3D image software, including:
 - file types
 - function of the software
 - main image editing tools
 - scale and units
- "Cartesian coordinate system" and how it relates to 3D graphics file manipulation
- the purpose of "slicing" in the preparation of G-Code for 3D object build
- the effect of setting resolution and deposition thickness in 3D graphics on 3D print output quality
- work health and safety (WHS) requirements and workplace procedures relevant to 3D printing technologies
- intellectual property and copyright laws and requirements in relation to 3D printing.
-

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the pre-media field of work and include access to:

- a range of model files and image files with errors
- a computer with industry-standard 3D software packages
- a 3D printer or 3D printer specifications
- organisational policies and procedures relating to use and storage of data and files.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guides are available from VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPTD302 Set up and produce 3D prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 3.0.

Application

This unit describes the skills and knowledge required to produce three-dimensional (3D) objects for internal and external clients using a 3D printer.

It applies to individuals employed in a range of industry sectors who use 3D files and scanning data to produce 3D objects for a range of applications.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Three-Dimensional Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify the print requirements	1.1 Determine object requirements against client specifications and confirm with client 1.2 Evaluate available printer and materials to determine preferred options to meet client specifications 1.3 Calculate print construction time and cost and obtain client approval to proceed with preferred options 1.4 Upload data files into the printer software and check 3D model to ensure it meets specifications

ELEMENT	PERFORMANCE CRITERIA
	1.5 Assess quality of data file and discuss possible adjustments with client 1.6 Adjust file as required and save in required printer format
2. Prepare the 3D printer	2.1 Select personal protective equipment (PPE) and fit in accordance with work health and safety (WHS) procedures 2.2 Conduct pre start checks on the 3D printer to ensure correct operation according to manufacturer operating procedures 2.3 Adjust printer settings for specified tolerances and in accordance with client specifications 2.4 Load printer with specified construction material in accordance with client specifications 2.5 Install and prepare printer build platform according to manufacturer operating procedures
3. Operate and monitor the 3D printer	3.1 Operate printer in accordance with manufacturer operating procedures and WHS procedures 3.2 Check sensor displays and readings to ensure that they remain within the correct operating parameters specified in the manufacturer operating procedures 3.3 Monitor printing process to check that object is forming as per client specifications, and adjust as necessary 3.4 Monitor consumables and recharge as required 3.5 Report errors and faults in operation to relevant personnel for maintenance or repair
4. Remove and prepare model for client	4.1 Remove printed 3D object from the printer bed according to manufacturer operating procedures 4.2 Remove support framework using appropriate tools, chemicals and PPE, and according to manufacturer operating procedures 4.3 Clean and prepare 3D object in accordance with client specifications
5. Reset printer ready for next job or shutdown	5.1 Clean printer and worksite in accordance with organisational policies and procedures and manufacturer operating procedures after each print 5.2 Determine reset or shutdown requirements based on print queue, and reset or shutdown printer according to organisational and manufacturer operating procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

Skill	Description
Reading	Analyses graphics files and other documentation to determine 3D printing requirements
Writing	Names data files according to specified naming conventions
Oral communication	- Participates in verbal exchanges using active listening and questioning to convey and clarify printing information - Presents complex information using clear and persuasive language, and appropriate tone and pace for the audience and purpose
Numeracy	- Uses mathematical processes to estimate time - Performs mathematical calculations to check and adjust software to reflect appropriate tolerances for printing
Navigate the world of work	- Understands roles and responsibilities for tasks and makes basic decisions on work completion parameters - Complies with organisational and manufacturer procedures and in accordance with work health and safety (WHS) procedures
Interact with others	Understands what to communicate, with whom and how, in routine work situations
Get the work done	- Makes routine decisions and implements standard procedures for routine tasks - Accepts responsibility for addressing less predictable problems and initiates standard procedures in response, applying problem solving processes - Uses familiar digital technologies and systems to control equipment, access information, enter data and save files

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPTD302 Set up and produce 3D print	ICPPRN395 Set up and produce 3D print	Updates to elements, performance criteria and assessment	Not equivalent

		requirements	

Links

Companion Volume Implementation Guides are available from VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPTD302 Set up and produce 3D prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 3.0.

Performance Evidence

The candidate must demonstrate they can perform the following according to the standards defined in the elements, performance criteria and foundation skills of this unit.

The candidate must demonstrate the ability to produce at least two 3D prints in accordance with work health and safety requirements and workplace procedures to meet required outcomes. This includes demonstrating the ability to:

- communicate with client to identify needs
- interpret specifications and confirm client requirements for a three-dimensional (3D) printed object
- prepare data files, printer and materials to suit the requirements of print job
- prepare, operate and shut down a 3D printer according to manufacturer and organisational requirements.

Knowledge Evidence

The candidate must be able to demonstrate the following knowledge to effectively complete the tasks outlined in the elements and performance criteria of this unit, and to manage tasks in the context of the work role:

- features of common 3D printers including:
 - files types used
 - level of precision
 - basic operation
 - common applications
 - hazards associated with use
 - construction materials
 - printing technologies
- features of common materials for 3D prints including:
 - properties
 - performance

- durability
- cost
- required processing time
- post processing required
- colour quality
- types of post processing including:
 - curing
 - sanding
 - spray painting
 - gluing
 - assembling
 - inserting threads
- the impact that the file type and graphics quality has on the output of the printed object
- printer parameters including:
 - scale and build platform size
 - number of models to output
 - print speed
- work health and safety (WHS) considerations for consumables used in current 3D printers
- work health and safety (WHS) requirements for working with technologies currently used for 3D printing
- purpose and process for using and safely removing structure supports in 3D printing
- steps in cleaning a 3D object
- intellectual property and copyright laws and requirements in relation to 3D printing.
-

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing and graphic arts field of work and include access to:

- a 3D printer
- organisational and manufacturer operating procedures
- 3D printer ready files
- consumables necessary to print 3D models
- relevant personal protective equipment (PPE).

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guides are available from VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPTD303 Set up and produce 3D scans

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 3.0.

Application

This unit describes the skills and knowledge required to set up and operate a three-dimensional (3D) scanner to scan 3D objects and output data to a specified data file type.

It applies to individuals working in a variety of industry sectors, who utilise 3D images for graphical, artistic and manufacturing applications.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Three-Dimensional Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare object to be scanned	1.1 Select appropriate scanner based on availability, and the type and complexity of object to be scanned 1.2 Identify and document output requirements of scan in accordance with client specifications 1.3 Treat surface of object in accordance with scanner's operating requirements 1.4 Orientate object in accordance with organisational policies and

	procedures
2. Prepare scanner	2.1 Check and adjust scanner in readiness for operation according to manufacturer operating procedures 2.2 Report any malfunctions to designated personnel for repair or maintenance in accordance with organisational policies and procedures 2.3 Select resolution of the scanner in accordance with client requirements
3. Operate scanner	3.1 Operate scanner according to manufacturer operating procedures and organisational work health and safety (WHS) procedures 3.2 Monitor scanner settings and adjust as required in accordance with manufacturer operating procedures 3.3 Check data and images to ensure quality meets client requirements 3.4 Convert scanner output files into specified file format 3.5 Shut down and reset scanner according to organisational policies and procedures and manufacturer operating procedures
4. Prepare output file ready for end user	4.1 Import scan data into secondary software according to organisational policies and procedures 4.2 Align scan data to real world planes according to client specifications 4.3 Present data files to the client and confirm requirements have been met

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

Skill	Description
Reading	Analyses graphics files and other documentation to determine scanning requirements
Writing	Names data files according to naming conventions
Oral communication	Effectively participates in verbal exchanges using active listening and questioning to convey and clarify information

n	
Numeracy	• Uses mathematical processes to estimate size • Performs mathematical calculations to check and adjust software to reflect appropriate tolerances for scanning
Navigate the world of work	• Understands roles and responsibilities for tasks and makes basic decisions on work completion parameters • Complies with legislative and organisational requirements
Interact with others	• Understands what to communicate, with whom and how, in routine work situations
Get the work done	• Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes • Makes routine decisions and implements standard procedures to address problems • Uses familiar digital technologies and systems to control equipment, access information, enter data and save files

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPTD303 Set up and produce 3D scans	ICPPRP398 Set up and produce a 3D scan	Updates to elements, performance criteria and assessment requirements	Not an equivalent unit

Links

Companion Volume Implementation Guides are available from VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPTD303 Set up and produce 3D scans

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 3.0.

Performance Evidence

The candidate must demonstrate they can perform the following according to the standards defined in the elements, performance criteria and foundation skills of this unit.

The candidate must demonstrate the ability to produce at least two 3D scans in accordance with work health and safety requirements and workplace procedures to meet required outcomes. This includes demonstrating the ability to:

- communicate with client to identify needs
- determine scan requirements from client specifications and object criteria
- select an appropriate scanner and prepare the surface of the object
- prepare the scanner and orientate the object effectively
- scan the object safely and efficiently
- create files from scanner to client specifications.

Knowledge Evidence

The candidate must be able to demonstrate the following knowledge to effectively complete the tasks outlined in the elements and performance criteria of this unit, and to manage tasks in the context of the work role:

- common three-dimensional (3D) scanner technologies and their respective applications, capabilities and limitations
- current industries where 3D scanning is used
- workplace procedures and safety requirements when using 3D scanners
- importance of adjusting or considering scale, units of measurement, calibration, distance from subject, tolerance, and resolution for efficient 3D scans
- output file types for various applications, including but not limited to, the following file extensions:
 - STL - standard triangle language/standard tessellation language file format
 - OBJ - geometry definition file format
 - PLY - polygon file format

- VRML - virtual reality modelling language file format
- XYZ/PTX - point cloud file formats
- AMF - additive manufacturing file format
- file conversion process required to prepare files for various applications
- intellectual property and copyright laws and requirements in relation to 3D printing.
-

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing and graphic arts field of work and include access to:

- a 3D model
- a 3D scanner
- specifications for scanner output files
- organisational and manufacturer operating procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guides are available from VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPPTD304 Apply problem solving techniques to 3D printing maintenance and operation

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 3.0.

Application

This unit describes the skills and knowledge required to apply problem solving techniques, undertake operational maintenance and implement solutions required of three-dimensional (3D) printing.

It applies to individuals, employed in a range of industry sectors, who provide 3D printing services and who are required to perform routine maintenance and troubleshooting in addition to their main duties.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Three-Dimensional Printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Apply operational maintenance techniques	1.1 Interpret and undertake operational maintenance according to manufacturer specifications 1.2 Identify and address potential risks, hazards and environmental issues and implement control measures 1.3 Select and wear personal protective equipment (PPE) for work

	activities in accordance with work health and safety (WHS) procedures 1.4 Identify and obtain equipment required for maintenance according to organisational policies and procedures 1.5 Carry out routine maintenance activities according to manufacturer specifications 1.6 Create and maintain a record of maintenance undertaken 1.7 Identify and document recommended spare parts required according to manufacturer specifications
2. Identify and document faults and current conditions	2.1 Identify and record hardware, software, user or procedural faults as they occur 2.2 Assess findings and define faults to be investigated 2.3 Develop a register for the purposes of documenting current conditions of hardware, software or operating procedures
3. Research and consider solutions to faults	3.1 Conduct research to identify and document potential solutions to faults according to organisational policies and procedures and manufacturer specifications 3.2 Develop and evaluate potential solutions to determine approach to rectification in accordance with organisation's policies and procedures 3.3 Present recommended solution to designated persons for confirmation or escalation as required
4. Implement solution	4.1 Plan and prepare for implementation of solution 4.2 Gather equipment and resources required for the implementation of selected solution 4.3 Apply agreed techniques to respond to identified issue 4.4 Test hardware, software and procedures to determine whether solution was successful in resolving identified fault 4.5 Evaluate implemented solution for efficiency and record findings

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

Skill	Description
Reading	Interprets familiar textual information from a range of sources to identify faults, compare technical specifications, and identify solutions to new and emerging issues
Writing	Develops materials and resources using simple vocabulary to record information in a sequential manner for client engagement as well as internal reference
Oral Communication	- Presents complex information using clear and persuasive language, and appropriate tone and pace for the audience and purpose - Participates in verbal exchanges using active listening and questioning to convey and clarify printing information
Navigate the world of work	- Understands roles and responsibilities for tasks and makes decisions on work required - Complies with organisational and manufacturer procedures and specifications
Interact with others	Understands what to communicate, with whom and how, in work situations
Get the work done	- Accepts responsibility for planning and implementing routine and complex tasks - Uses problem solving techniques to evaluate faults as they occur - Initiates standard diagnostic and maintenance procedures when responding to familiar and unfamiliar problems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPTD304 Apply problem solving techniques to 3D printing	Not applicable	New Unit	Not applicable

Links

Companion Volume Implementation Guides are available from VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPPTD304 Apply problem solving techniques to 3D printing maintenance and operation

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 3.0.

Performance Evidence

The candidate must demonstrate they can perform the following according to the standards defined in the elements, performance criteria and foundation skills of this unit.

The candidate must demonstrate the ability to undertake routine maintenance and trouble shoot and rectify problems for a 3D printer in accordance with work health and safety requirements and workplace procedures to meet required outcomes. This includes demonstrating the ability to:

- undertake routine maintenance on a 3D printer according to manufacturer specifications a minimum of 2 times
- determine the cause of a routine malfunction a minimum of 2 times
- produce documentation that records faults and recommends solutions to problems
- prepare, operate and shut down a 3D printer according to manufacturer and organisational requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

The candidate must be able to demonstrate the following knowledge to effectively complete the tasks outlined in the elements and performance criteria of this unit, and to manage tasks in the context of the work role:

- current hardware, software and procedures
- current industry maintenance and service practices, processes and procedures
- current operating systems
- solutions to common faults in hardware and software
- features of common 3D printers including:
 - basic operation

- common applications
- hazards associated with use
- construction technology
- work health and safety (WHS) considerations for consumables used in current 3D printers
- workplace procedures and WHS requirements for working with technologies currently used for 3D printing.
-

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing and graphic arts field of work and include access to:

- a 3D printer
- manufacturer's operating procedures
- relevant personal protective equipment (PPE)
- organisational and manufacturer operating procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guides are available from VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP211 Reclaim screen automatically

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely reclaim screens using automatic cleaning equipment.

It applies to individuals working under direct supervision and performing mainly routine tasks such as monitoring machinery operations and carrying out routine maintenance.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Select and prepare chemicals	1.1 Ink and stencil type are correctly identified and screen is assessed for suitability to be reclaimed 1.2 Screen reclamation chemicals are selected and prepared according to manufacturer or supplier specifications 1.3 Appropriate safety gear is selected and worn according to manufacturer or supplier specifications and work health and safety (WHS) requirements
2 Maintain and adjust	2.1 Automatic cleaning equipment is inspected and routine user

ELEMENT	PERFORMANCE CRITERIA
equipment	maintenance is carried out according to manufacturer or supplier specifications and enterprise procedures 2.2 Automatic cleaning equipment is adjusted to suit ink system, mesh type and frame size
3 Wash screen	3.1 Screens are washed using pressure gun or automatic machine in suitably ventilated area with required extraction system 3.2 Stains and hazes are removed using appropriate chemicals according to manufacturer or supplier specifications and WHS requirements 3.3 Screens are checked for damage and any defects are reported and/or rectified according to enterprise procedures
4 Store screen	4.1 Screens are correctly identified and labelled 4.2 Screens are stored in clean, dry environment according to manufacturer or supplier specifications
5 Carry out routine maintenance	5.1 Cleaning equipment is lubricated, cleaned and adjusted according to manufacturer or supplier specifications 5.2 Faults are identified, reported and/or rectified according to manufacturer or supplier specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.3, 2.1, 3.2, 4.2, 5.1, 5.2	Recognises and interprets textual information to follow and adhere to requirements
Writing	3.3, 4.1, 5.2	Completes required documentation accurately using correct technical and enterprise language
Oral Communication	3.3, 5.2	- Articulates clearly using specific and factual information - Uses listening and questioning techniques to clarify and confirm understanding
Numeracy	1.2, 2.2, 3.2, 5.1	Recognises numerical information and uses mathematical formulae to calculate measurements and

		adjustments
Navigate the world of work	1.2, 1.3, 2.1, 3.1-3.3, 4.2, 5.1, 5.2	• Takes personal responsibility for adherence to legal and regulatory requirements with specific reference to safety • Complies with organisational policies and procedures relevant to own role
Get the work done	1.1-1.3, 2.1, 2.2, 3.2, 3.3, 4.1, 5.2	• Follows clearly defined instructions and sequencing and monitors own progress for the task • Responds to predictable problems and implements standard or logical solutions • Takes responsibility for routine low-impact decisions within familiar situations • Understands the purpose and specific functions of some common digital tools used in work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP211 Reclaim screen automatically	ICPSP211C Reclaim screen automatically	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP211 Reclaim screen automatically

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use automatic cleaning equipment to reclaim THREE screens, with various grades of meshes and ink types, according to manufacturer guidelines and enterprise procedures, including:
 - selecting and using chemicals and associated safety gear
 - checking and adjusting automatic cleaning equipment prior to use
 - washing and checking screens for defects
 - storing screens
- maintain automatic cleaning equipment, including identifying faults and taking action according to manufacturer guidelines.

Note: If a specific volume or frequency

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify the types of stencil that are used
- explain the significance of mesh counts
- explain the handling technique used for frames with various mesh counts
- describe the personal protective equipment items used for screen reclamation
- identify the health and safety concerns associated with chemical handling
- explain why various ink types are treated differently when reclaiming
- determine what pollution controls are in operation with regards to environmental issues
- explain where to find information on the application of each chemical
- list the ventilation and extraction systems that should be in operation
- outline the maintenance procedures that are necessary for equipment or machinery used
- describe the properties of different reclamation chemicals

- describe how chemicals are applied for stencil removal
- list the chemicals that are used to remove stains or haze
- explain the method used to identify the reclamation status of screens
- outline the key points to consider when storing reclaimed screens
- identify machine manuals, safety and other documentation relevant to this task and for each one:
- state its location
- explain what type of information is included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to:

- chemicals and lubricants
- appropriate safety gear
- automatic cleaning equipment
- screens.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP215 Prepare screen

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely select and prepare screens for printing using appropriate equipment and procedures.

It applies to individuals working under direct supervision and performing mainly routine tasks.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Select frame	1.1 Frame is selected according to job specifications 1.2 Quality, type and finish of frame are specified
2 Prepare frame	2.1 Frame surface is appropriately prepared free of imperfections to receive mesh 2.2 Tools and equipment used in frame preparation are suitable to achieve standard indicated in job specifications
3 Select mesh	3.1 Required mesh type is selected according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	3.2 Imperfections and flaws are identified and appropriate remedial action is taken 3.3 Mesh is measured and cut from bulk supply to meet screen specifications with minimum wastage
4 Stretch and fix mesh	4.1 Mesh is positioned in tensioning equipment at correct angle according to job specifications 4.2 Tension is set and applied according to job specifications 4.3 Tension is checked according to manufacturer or supplier specifications 4.4 Mesh is pre-stretched prior to fixing and mesh is fixed to frame according to frame construction requirements 4.5 Chemicals are mixed for application according to manufacturer specifications 4.6 Screen is removed from apparatus after appropriate curing
5 Convert mesh	5.1 Chemicals are selected for conversion of mesh according to manufacturer or supplier specifications 5.2 Chemicals are applied to effect conversion according to manufacturer or supplier specifications and to work health and safety (WHS) requirements
6 Store screen	6.1 Screens are identified and labelled 6.2 Screens are stored in safe, clean and dry environment in subdued light

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.2, 3.1, 4.1-4.5, 5.1, 6.1	Recognises and interprets textual information to determine and adhere to requirements
Writing	1.2, 6.1	Uses clear, specific and industry related terminology to legibly and correctly complete workplace documentation
Numeracy	3.3, 4.1, 4.5	Uses mathematical formulae to calculate measurements, ratios, scale and angles

Navigate the world of work	5.2, 6.2	• Takes some personal responsibility for adherence to legal and regulatory requirements with specific reference to safety • Complies with all organisational policies and procedures relevant to own role
Get the work done	1.1, 2.1, 2.2, 3.1-3.3, 4.2-4.4, 4.6, 5.1, 6.1, 6.2	• Follows clearly defined instructions and sequencing and monitors own progress for the task • Responds to predictable problems and implements standard or logical solutions • Takes responsibility for routine low-impact decisions within familiar situations • Understands the purpose and some specific functions of common digital tools used in work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP215 Prepare screen	ICPSP215C Prepare screen	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP215 Prepare screen

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- select TWO different screen frame types, either fixed or microchase, stretch and fix mesh as appropriate and prepare screen for stencil application, according to manufacturer and job specifications, enterprise procedures and work health and safety (WHS) requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain why a frame is needed and how a particular frame is selected
- list the tools needed to prepare the frame surface
- describe what to look for to achieve a good surface for mesh adhesion
- list different mesh types and explain what type of job each mesh type would be suited to
- describe common flaws or imperfections in screen mesh, how to identify them and what to do about them
- explain techniques used to minimise wastage when cutting mesh
- explain the position that the mesh is placed in before tensioning
- explain the methods of pre-stretching the mesh prior to securing it
- describe how tension is measured
- describe the various methods of fixing mesh to frame
- identify the pre-tensioning techniques that can be used
- describe the methods for converting screen mesh chemically and mechanically
- explain the method used to identify the mesh on a screen
- describe the ideal conditions for storing screens
- identify manuals, safety and other documentation relevant to this task, where they are kept and the information included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to:

- chemicals
- tools and equipment
- mesh
- frames.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP221 Prepare substrate

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to select and safely prepare and store a wide range of substrates for screen printing.

It applies to individuals working under direct supervision and performing mainly routine tasks.

In some cases, there may be an overlap with ICPCBF221 Set up and produce basic guillotined product. If substrate preparation is mostly guillotining, then ICPCBF221 Set up and produce basic guillotined product should be delivered.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Select substrate	1.1 Substrates are selected according to job specifications 1.2 Substrates selected must be of suitable form and quality according to job specifications and end use of product
2 Process substrate	2.1 Processing of substrate is carried out according to job

ELEMENT	PERFORMANCE CRITERIA
	specifications 2.2 Necessary preventive action is taken to avoid wastage and to ensure best yield with respect to grain direction and type of substrate selected 2.3 User maintenance requirements are identified and implemented according to manufacturer or supplier instructions 2.4 Substrate is inspected and print capability assessed, including need for any special preparation requirements 2.5 Substrate is suitably pre-treated, where required 2.6 Substrate is appropriately labelled according to job specifications
3 Store and handle substrate	3.1 Materials are safely handled according to manufacturer or supplier specifications 3.2 Materials and substrate are appropriately handled and stored according to manufacturer or supplier specifications to prevent damage and hazards to personnel 3.3 Offcuts of materials are disposed of according to regulatory requirements and enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 2.3, 2.6, 3.1-3.3	Recognises and evaluates textual information to determine and adhere to requirements
Writing	2.6	Completes required details legibly and accurately for reference details
Numeracy	1.1, 3.2	Recognises basic numerical data to determine volumes and dimensions of required substrate
Navigate the world of work	3.1-3.3	- Takes personal responsibility for adherence to legal and regulatory requirements with specific reference to safety - Complies with all organisational policies and procedures relevant to own role
Get the work	1.1, 1.2, 2.2-2.5, 3.3	Follows clearly defined instructions and sequencing and monitors own progress for the task

done		• Responds to predictable problems and implements standard or logical solutions • Takes responsibility for routine low-impact decisions within familiar situations • Understands the purpose and some specific functions of common digital tools used in work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP221 Prepare substrate	ICPSP221C Prepare substrate	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP221 Prepare substrate

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- select, process and store TWO substrates according to manufacturer specifications, job specifications and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe the types of jobs that would suit different grades and thicknesses of substrate
- explain how to identify defects and irregularities in the substrate
- explain the pre-treatment of the surface required before printing
- describe the tests that should be undertaken to determine the suitability of the substrate for printing
- explain how to cut substrate to minimise wastage
- identify the equipment used for preparing substrate
- describe how to prepare substrate and the quality of preparation monitoring
- explain the handling and storage procedures to prevent damage to substrate prior to printing
- explain the correct procedures for the disposal of offcuts of substrate
- identify manuals, safety information and other documentation relevant to this task, where they are located and the information included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to substrates.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP222 Prepare and cut screen print substrate

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely select, inspect and cut substrate according to job specifications.

It applies to individuals working in the printing and graphic arts industry under direct supervision and performing mainly routine tasks such as matching materials with the job specifications and checking and monitoring output.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare substrate	1.1 Substrates selected are of suitable quality according to job specifications and end use of product 1.2 Print capability of substrates is inspected and assessed, including need for any special preparation requirements 1.3 Preventive action is taken to avoid wastage and to ensure best yield with respect to grain direction and type of substrate selected 1.4 Substrate is pre-treated appropriately, where required

ELEMENT	PERFORMANCE CRITERIA
2 Cut substrate	2.1 Set-up is carried out correctly in minimum time with minimum wastage 2.2 Grip and lay edges of sheet are identified 2.3 Knives are checked for appropriate sharpness 2.4 Cutting sticks are replaced when necessary 2.5 Guillotine is manually set up and adjusted according to job specifications 2.6 Clamping pressures are set up and adjusted according to job specifications 2.7 Problems in cutting (guillotining) machine operation are identified and reported according to enterprise procedures 2.8 Quality of cuts is checked to ensure quality standards are met

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.5-2.7	Interprets textual information from relevant sources to identify equipment suitability and adhere to procedures and standards
Writing	2.7	Uses clear and specialised language to accurately document machinery faults
Numeracy	1.1, 2.5, 2.6	Uses simple mathematical equations to calculate measurements and make required adjustments to equipment and settings
Navigate the world of work	2.7	Takes some personal responsibility for adherence to organisational policies and procedures relevant to own role
Get the work done	1.1-1.4, 2.1-2.8	- Follows clearly defined instructions and sequencing, and monitors own progress for the task - Responds to predictable problems and implements standard or logical solutions - Takes responsibility for routine low-impact decisions within familiar situations

		Understands the purpose and specific functions of some common digital tools used in work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP222 Prepare and cut screen print substrate	ICPSP222C Prepare and cut screen print substrate	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP222 Prepare and cut screen print substrate

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- inspect and cut substrates according to job specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the typical information contained in job specifications
- describe the process for checking guillotine knives
- outline the process for guillotine set-up and operation
- describe safe guillotine handling and operation practices
- explain the proper stacking and storage of processed substrate.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to guillotining machines and substrates.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP233 Manually prepare direct emulsion stencil

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely select, prepare and store direct emulsion stencils using manual techniques.

It applies to individuals working under direct supervision and performing mainly routine tasks such as monitoring equipment and ensuring set processes are followed.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare work area and equipment	1.1 Work area is made clean and functional prior to commencement of work 1.2 All equipment is inspected to ensure it is functional and, where necessary, appropriate remedial action is taken prior to commencement of work 1.3 Appropriate coating trough is selected, ensuring it is free of nicks and burrs

ELEMENT	PERFORMANCE CRITERIA
2 Prepare screen	2.1 Screen is selected according to job specifications 2.2 Chemicals are applied and removed according to work health and safety (WHS) requirements and manufacturer or supplier specifications 2.3 Tension of screen mesh is checked for suitability according to job specifications
3 Select emulsion	3.1 Emulsion is selected according to requirements for ink type, print resolution, substrate, mesh type and machine type 3.2 Emulsion is checked for expiry date and appropriate action taken 3.3 Emulsion is prepared according to WHS requirements and manufacturer or supplier specifications 3.4 Emulsion is applied and dried according to manufacturer or supplier specifications
4 Process coated screen	4.1 Image films are appropriately positioned onto prepared screen and positioned in cleaned, prepared and appropriate exposure device 4.2 Light source is positioned according to manufacturer or supplier specifications 4.3 Exposure is calculated and stencil exposed according to manufacturer or supplier specifications 4.4 Exposed screen is removed from vacuum frame exposure device 4.5 Exposed screen is washed out after positive removal according to WHS requirements and manufacturer or supplier specifications 4.6 Processed stencil or screen is inspected for flaws and scum
5 Dry stencil	5.1 Processed stencil is dried according to manufacturer or supplier specifications 5.2 Backing sheet is carefully removed and stencil checked for full adhesion
6 Block out screen	6.1 Backing sheet is carefully removed and stencil checked for full adhesion 6.2 Stencil is inspected for flaws, scum and orientation 6.3 Pinholes are spotted out with suitable filler and taped according to ink type and job specifications
7 Store screen	7.1 Prepared screen is labelled according to enterprise procedures 7.2 Prepared screen is stored in clean, dry environment according to manufacturer or supplier specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.1-2.3, 3.2-3.4, 4.2, 4.3, 4.5, 5.1, 6.3, 7.2	Recognises and evaluates textual information to determine and adhere to requirements
Writing	7.1	Completes required details legibly and accurately for reference details
Numeracy	2.3, 3.2, 4.3	Recognises basic numerical data and calculates whole numbers and decimals for exposure time and measurements
Navigate the world of work	2.2, 3.3, 4.5, 7.1, 7.2	Takes personal responsibility for adherence to organisational policies and procedures relevant to own role
Get the work done	1.1-1.3, 2.1-2.3, 3.1-3.3, 4.1-4.4, 4.6, 5.2, 6.1-6.3	- Follows clearly defined instructions and sequencing and monitors own progress for the task - Responds to predictable problems and implements standard or logical solutions - Takes responsibility for routine low-impact decisions within familiar situations - Understands the purpose and some specific functions of some common digital tools used in work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP233 Manually prepare direct emulsion stencil	ICPSP233C Manually prepare direct emulsion stencil	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP233 Manually prepare direct emulsion stencil

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare TWO different direct screens and TWO direct emulsion stencils using manual coating and exposure techniques according to manufacturer and job specifications, enterprise procedures and work health and safety (WHS) requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the significance of the mesh count
- explain the effect that screen tension has on emulsion coating
- explain how to determine the emulsion suitable for the job
- explain the significance of good housekeeping in the preparation of the work area and equipment
- describe the effect that the coating trough edge has on emulsion coating
- explain the requirements for choosing emulsion for a particular job
- explain the reasons for checking the expiry date of emulsions
- determine the maximum temperature at which the emulsion can be dried
- explain the need to have good vacuum pressure in the vacuum frame
- outline the process for selecting the light source position
- explain the formula used to calculate exposure time
- explain the effects of overexposure and underexposure
- explain how the optimum exposure time is determined
- describe the effect on exposure that a white or coloured mesh has
- determine how the screen is washed out properly

- identify the characteristics that determine a good and bad stencil
- explain why the screen is dried before blocking out
- explain what determines the type of filler used for blocking out
- explain the reasons for spotting pinholes and taping the screen
- determine the WHS requirements for UV exposure light
- explain the means by which stored screens are able to be identified at a later date
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to chemicals and relevant equipment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP235 Prepare stencil using photographic indirect method

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely select, prepare, process and store stencils using the photographic indirect method.

It applies to individuals working under direct supervision and performing mainly routine tasks.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare work area	1.1 Work area is made clean and functional prior to commencement of work 1.2 All equipment, tools and materials are inspected to ensure they are functional and, where necessary, appropriate remedial action is taken prior to commencement of work 1.3 Activating chemicals are prepared according to work health and safety (WHS) requirements and manufacturer or supplier specifications

ELEMENT	PERFORMANCE CRITERIA
2 Prepare screen	2.1 Screen is selected according to job specifications 2.2 Chemicals are applied and removed according to WHS requirements and manufacturer or supplier specifications 2.3 Tension of screen mesh is checked for suitability according to job specifications
3 Select indirect stencil material	3.1 Stencil material is selected according to requirements for ink type, print resolution, substrate and machine type 3.2 Stencil material is checked for faults and expiry date, and suitable action is taken
4 Process material	4.1 Selected material is cut to size according to job specifications with minimisation of waste 4.2 Material is placed in vacuum frame with positive positioned and intimate vacuum achieved according to manufacturer or supplier and job specifications 4.3 Exposure is calculated and stencil is exposed according to manufacturer or supplier specifications 4.4 Light source is positioned according to manufacturer or supplier specifications 4.5 Exposed stencil is removed from vacuum frame and treated with necessary activator, if required, according to WHS requirements and manufacturer or supplier specifications 4.6 Activated stencil is washed according to WHS requirements and manufacturer or supplier specifications 4.7 Exposed stencil is inspected for processing flaws
5 Apply stencil to screen	5.1 Prepared screen is re-wet and inspected for cleanliness and dust 5.2 Stencil is positioned and adhered accurately according to manufacturer or supplier specifications
6 Dry stencil	6.1 Processed stencil is dried according to manufacturer or supplier specifications 6.2 Backing sheet is carefully removed and stencil is checked for full adhesion
7 Block out screen	7.1 Stencil is inspected for flaws, scum and orientation 7.2 Non-image areas of prepared screen are blocked out with filler suitable for ink type and according to job specifications 7.3 Pinholes are spotted out with suitable filler and faulty or damaged images are retouched and are taped according to ink type

ELEMENT	PERFORMANCE CRITERIA
	and job specifications
8 Store screen	8.1 Prepared screen is labelled according to enterprise procedures 8.2 Prepared screen is stored in clean, dry environment according to manufacturer or supplier specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 2.1-2.3, 3.1, 3.2, 4.1-4.4, 5.2, 6.1, 7.2, 7.3, 8.1, 8.2	Interprets textual information from relevant sources to identify and adhere to procedures and standards
Writing	8.1	Completes required details legibly and accurately for future reference
Numeracy	1.3, 2.2, 2.3, 4.1, 4.3	Uses mathematical formulae to calculate measurements and adjust equipment and settings
Navigate the world of work	1.3, 2.2, 4.5, 4.6, 8.1	- Takes personal responsibility for adherence to legal and regulatory requirements with specific reference to safety - Complies with organisational policies and procedures relevant to own role
Get the work done	1.1, 1.2, 2.1, 2.3, 3.1, 3.2, 4.1, 4.2, 4.4-4.7, 5.1, 5.2, 6.1, 6.2, 7.1-7.3	- Follows clearly defined instructions and sequencing and monitors own progress for the task - Responds to predictable problems and implements standard or logical solutions - Takes responsibility for routine low-impact decisions within familiar situations - Understands the purpose and some specific functions of common digital tools used in work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP235 Prepare stencil using photographic indirect method	ICPSP235C Prepare stencil using photographic indirect method	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP235 Prepare stencil using photographic indirect method

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly prepare TWO different indirect screens and TWO photographic indirect stencils using manual or mechanical techniques according to manufacturer and job specifications, enterprise procedures and work health and safety (WHS) requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the significance of mesh count
- explain why the screen must be tensioned correctly
- identify the chemicals that are used for pre-treating and degreasing
- describe the method of preparing the activator according to WHS standards
- explain the importance of a dust-free work area when working with indirect stencils
- outline the inspection process of equipment to ensure good function
- list the characteristics of indirect stencils relative to ink type, print resolution and substrate
- explain the selection of indirect stencil material
- identify the common faults associated with indirect film
- explain the importance of vacuum pressure prior to exposing the stencil
- explain the position of the light source and the calculation of exposure time
- list the effects of overexposure and underexposure
- describe the methods of activating film
- determine the water temperature required for washing indirect stencils
- explain how to recognise and rectify flaws
- describe the main considerations before applying the stencil to the screen

- describe the method of positioning and adhering the stencil to the screen
- explain the process of drying the stencil and removing the backing sheet
- describe the method of rectifying flaws and scum in the stencil
- explain what determines the type of filler used for blocking out
- explain why pinholes are spotted and the screen taped
- explain by what means this screen is able to be identified at a later date
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to cleaning chemicals and relevant equipment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP270 Manually prepare and produce screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manually prepare and produce screen prints using manual screening techniques for long print runs that involve a production process.

It applies to individuals working under direct supervision and performing mainly routine tasks.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Identify job requirements	1.1 Material safety data sheets (MSDS) are used to identify safe chemical handling procedures 1.2 Substrate is checked for conformance to job specifications with any irregularities reported and/or rectified 1.3 Ink is checked for conformance to job specifications 1.4 Stencil is checked for conformance to job specifications
2 Prepare machine to print	2.1 Substrate position and stencil registration are adjusted according

ELEMENT	PERFORMANCE CRITERIA
	to job specifications 2.2 Ink is applied to screen in quantity required for screen size 2.3 Equipment is kept clean and spillage is minimised
3 Produce proof print	3.1 Proof print is run off and checked for colour, strength, registration, adhesion, clarity, gloss level, drying and curing, artwork detail and other technical aspects according to job specifications 3.2 Adjustments are made according to product and machine specifications 3.3 Belt speed and energy required are set to achieve desired curing or drying properties 3.4 Appropriate approval to commence production is sought prior to commencement
4 Run job and monitor print quality	4.1 Printing speed production is adjusted to maximise quality and output 4.2 Print quality is continuously evaluated and adjusted as required 4.3 Effects of ink alterations during run are monitored and any discrepancy is notified according to enterprise procedures 4.4 Workplace documentation on job is completed as required 4.5 Curing and drying are constantly monitored and adjusted according to manufacturer or supplier and job specifications
5 Carry out routine user maintenance	5.1 Equipment is cleaned according to enterprise procedures 5.2 Fault conditions are identified and reported according to enterprise procedures
6 Stack production output	6.1 Output is checked for thorough drying and curing before stacking 6.2 Job status and progress are checked for conformance to job specifications and any necessary action is taken
7 Conduct shutdown	7.1 Material is transferred to correct destination in safe manner 7.2 Excess ink, screens, squeegees and flood coaters are removed and cleaned according to work health and safety (WHS) requirements and manufacturer or supplier specifications 7.3 Waste materials and chemicals are disposed of according to manufacturer or supplier specifications, regulatory requirements and enterprise procedures 7.4 Equipment and surrounding areas are cleaned according to

ELEMENT	PERFORMANCE CRITERIA
	manufacturer or supplier specifications 7.5 Tools and equipment are identified, stored and maintained according to manufacturer specifications to ensure ease of access and operator safety 7.6 Correct procedure for dealing with spilt chemicals is demonstrated according to WHS requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.4, 2.1, 3.1, 3.2, 4.3-4.5, 5.1, 5.2, 7.2-7.6	Interprets textual information from relevant sources to identify and adhere to procedures and standards
Writing	1.2, 4.3, 4.4, 5.2	Completes required details accurately using enterprise specific factual information
Oral Communication	1.2, 3.4, 4.3, 5.2	- Reports issues or provides explanations using clear and specific language - Uses listening and questioning techniques to confirm understanding
Numeracy	2.1, 3.3, 4.1, 4.5	Recognises numerical information and makes basic calculations to adjust production processes
Navigate the world of work	4.3, 5.1, 5.2, 7.1-7.6	- Takes personal responsibility for adherence to legal and regulatory requirements with specific reference to safety - Complies with organisational policies and procedures relevant to own role
Interact with others	3.4	Contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.2-1.4, 2.1-2.3, 3.1-3.3, 4.1, 4.2, 4.5, 5.2, 6.1, 6.2, 7.5	- Follows clearly defined instructions and sequencing and monitors own progress for the task - Responds to predictable problems and implements standard or logical solutions - Takes responsibility for routine low-impact decisions within familiar situations

		Understands the purpose and some specific functions of common digital tools used in work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP270 Manually prepare and produce screen prints	ICPSP270C Manually prepare and produce screen prints	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP270 Manually prepare and produce screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- set up screen printing machinery and produce a print that meets job specifications on a range of common substrates, using fundamental manual screening.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the information that can be gained from material safety data sheets (MSDS)
- explain why it is necessary to check the substrate for conformance to the job specifications
- describe the action required if the ink did not comply with the job specifications
- explain what compliance checks are made with the stencil
- determine what limitations occur when setting the substrate position
- describe the result if too much ink is applied to the screen
- explain why it is necessary to keep equipment clean
- outline the work health and safety (WHS) concerns when producing a manual print
- explain what is checked on the printed sheet when the proof print has been run off
- explain what determines the drying or curing system used for this application
- explain where to obtain product and machine specifications
- confirm what the result would be if the belt speed was too high
- explain why it is necessary to obtain final approval before commencing the production run
- identify aspects of the print that are evaluated during printing
- explain why it is necessary to make ink alterations during the run
- explain what happens to the workplace documentation when the print run is completed

- determine what WHS concerns there are in relationship to drying or curing systems
- explain what maintenance should be carried out on this machine
- explain why it is important to report any faulty equipment
- explain how to determine whether a print is dried or cured prior to stacking
- explain what the result would be if stacking occurs while the ink film is still wet
- describe the possible action needed if problems occur with the job progress
- explain how to identify the job's destination when the run has been completed
- explain the result of not keeping screens and squeegees clean
- describe the result of not following correct procedures when disposing of liquid waste
- explain the result of not keeping equipment and surrounding areas clean
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to cleaning chemicals and manual screen printing machines.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP271 Manually produce basic screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manually produce one or two colour screen prints in short runs or limited art prints.

It applies to individuals working under direct supervision and performing mainly routine tasks such as monitoring equipment, selecting appropriate products and ensuring set processes are followed.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Load substrate	1.1 Substrate is checked against job specifications with any irregularities reported and, where possible, rectified 1.2 Substrate position and stencil registration are adjusted according to job specifications
2 Apply ink to screen	2.1 Ink is applied to screen in quantity required for screen size 2.2 Equipment is kept clean and spills are minimised

ELEMENT	PERFORMANCE CRITERIA
	2.3 Ink is checked against job specifications
3 Produce proof print	3.1 Proof print is run off and checked for colour, strength, registration, adhesion, clarity, gloss level, drying or curing, artwork detail and other technical aspects according to job specifications 3.2 Adjustments are made as required 3.3 Appropriate approval to commence production is sought prior to commencement 3.4 Belt speed and energy required are set to achieve desired curing or drying properties
4 Run job and monitor print quality	4.1 Printing speed production is adjusted to maximise quality and output 4.2 Print quality is continuously evaluated and adjusted as required 4.3 Effects of ink alterations during run are monitored and any discrepancy is notified according to enterprise procedures 4.4 Workplace documentation is completed as required 4.5 Curing and drying are constantly monitored and adjusted according to manufacturer or supplier and job specifications
5 Carry out routine user maintenance	5.1 Equipment is cleaned according to enterprise procedures 5.2 Fault conditions are identified and reported according to enterprise procedures
6 Stack production output	6.1 Output is checked for thorough drying or curing before stacking 6.2 Job status and progress are checked against job specifications and any necessary action is taken
7 Finish operation	7.1 Excess ink, screens, squeegees and flood coaters are removed and cleaned according to work health and safety (WHS) requirements and manufacturer or supplier specifications 7.2 Waste materials are disposed of according to manufacturer or supplier specifications, regulatory requirements and enterprise procedures 7.3 Equipment and surrounding areas are cleaned according to manufacturer or supplier specifications and enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.3, 3.1, 4.4, 4.5, 5.1, 6.2, 7.1-7.3	- Establishes job requirements from relevant information - Identifies correct process from procedural documentation
Writing	1.1, 4.3, 4.4, 5.2	Completes required details accurately using enterprise specific and factual information
Oral Communication	1.1, 3.3, 4.3, 5.2	- Discusses remedial action with supervisor - Checks the progress and quality of the job with supervisor
Numeracy	2.1, 3.4, 4.1	Uses simple mathematical calculations to determine quantities and optimum output
Navigate the world of work	4.3, 5.1, 5.2, 7.1-7.3	- Takes some personal responsibility for adherence to legal and regulatory requirements with specific reference to safety - Complies with all organisational policies and procedures relevant to own role
Interact with others	1.1, 3.3	Contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1, 1.2, 2.1, 2.2, 3.1, 3.2, 3.4, 4.1, 4.2, 4.5, 5.2, 6.1, 6.2	- Follows clearly defined instructions and sequencing and monitors own progress for the task - Responds to predictable problems and implements standard or logical solutions - Takes responsibility for routine low-impact decisions within familiar situations - Understands the purpose and some specific functions of some common digital tools used in work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP271 Manually produce basic screen prints	ICPSP271C Manually produce basic screen prints	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP271 Manually produce basic screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- manually produce TWO different one or two colour print runs according to job specifications, enterprise procedures and work health and safety (WHS) requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify health and safety issues that apply when producing a manual print
- outline the procedure for setting up the frame relative to the position of the print image and base board
- describe the checks to be made of the ink to determine its suitability for printing on a particular substrate
- describe the checks to be made on the printed sheet when the proof print has been run off
- describe the system used for drying or curing
- explain how to determine whether a print is dried or cured prior to stacking
- outline the maintenance requirements for equipment or machinery used to produce manual prints
- explain how to clean up and dispose of waste materials used in the production of manual prints
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to cleaning chemicals and manual screen printing machines.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP273 Semi-automatically produce basic screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely produce one or two colour semi-automatic screen prints.

It applies to individuals working under direct supervision in the printing and graphic arts industry. They perform mainly routine tasks such as monitoring, adjusting and cleaning equipment, selecting appropriate products and ensuring set processes are followed in the use of a semi-automatic printing machine.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Load substrate	1.1 Substrate is checked against job specifications with any irregularities reported and rectified 1.2 Substrate position and stencil registration are adjusted according to job specifications
2 Apply ink to screen	2.1 Ink is applied to screen in quantity required for screen size 2.2 Equipment is kept clean and spills are minimised

ELEMENT	PERFORMANCE CRITERIA
	2.3 Colour is mixed and ink is checked against job specifications
3 Produce proof print	3.1 Proof print is run off and checked for colour, strength, registration, adhesion, clarity, gloss level, drying or curing, artwork detail and other technical aspects according to job specifications 3.2 Adjustments are made as required 3.3 Appropriate approval to commence production is sought prior to commencement 3.4 Belt speed and energy required are set to achieve desired properties and printing speeds are adjusted to suit
4 Run job and monitor print quality	4.1 Printing speed production is adjusted to maximise quality and output 4.2 Print quality is continuously evaluated and adjusted as required 4.3 Effects of ink alterations during run are monitored and appropriate action taken according to manufacturer and job specifications 4.4 Workplace documentation is completed as required 4.5 Curing and drying are constantly monitored and adjusted according to manufacturer and job specifications
5 Carry out routine user maintenance	5.1 Equipment is cleaned according to manufacturer specifications 5.2 Fault conditions are identified and reported according to enterprise procedures
6 Stack production output	6.1 Output is checked for thorough drying or curing before stacking 6.2 Job status and progress are checked against job specifications and any necessary action is taken
7 Shut down machine	7.1 Excess ink, screens, squeegees and flood coaters are removed and cleaned according to work health and safety (WHS) requirements and manufacturer specifications 7.2 Waste materials are disposed of according to manufacturer specifications, regulatory requirements and enterprise procedures 7.3 Equipment and surrounding areas are cleaned according to manufacturer specifications and enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.3, 2.4, 3.1, 4.3-4.5, 5.1, 5.2, 6.2, 7.1-7.3	- Evaluates and establishes job requirements from relevant information - Identifies correct process from enterprise procedures, manufacturers and suppliers
Writing	1.1, 4.4, 5.2	Completes required details accurately using enterprise specific and factual information
Oral Communication	1.1, 3.3, 5.2	- Discusses faults and any remedial action with supervisor - Checks the progress and quality of the job with supervisor
Numeracy	2.1, 3.4, 4.1, 4.5	Uses simple mathematical calculations to determine curing and drying times, required supplies and optimum belt speeds
Navigate the world of work	7.1-7.3	- Takes personal responsibility for adherence to legal and regulatory requirements with specific reference to safety - Complies with organisational policies and procedures relevant to own role
Interact with others	3.3	Contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1, 1.2, 2.2, 2.3, 3.1, 3.2, 3.4, 4.1-4.3, 4.5, 5.2, 6.1, 6.2	- Follows clearly defined instructions and sequencing and monitors own progress for the task - Responds to predictable problems and implements standard or logical solutions - Takes responsibility for routine low-impact decisions within familiar situations - Understands the purpose and specific functions of some common digital tools used in work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP273 Semi-automatically produce basic screen prints	ICPSP273C Semi-automatically produce basic screen prints	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP273 Semi-automatically produce basic screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely produce TWO different one or two colour print runs using a semi-automatic machine according to manufacturer, job and enterprise specifications
- demonstrate use of control, monitoring and data entry systems.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify the appropriate substrate, finished size, length of run and order of colours from the job specifications
- describe the correct placement of image on the sheet and the significance of substrate guides or lays in preparation for printing
- describe the ink selection system
- discuss the set parameters of belt speed and head units
- outline health and safety concerns when using a semi-automatic printing machine
- identify the type of squeegee or flood coater and squeegee angle used
- outline the process of producing a proof print and what needs to be checked on the proof
- explain the process of the continuous monitoring of print quality and the drying or curing of ink before stacking
- explain the purpose of workplace documentation
- outline the procedure required for disposing of unused ink and solvent rags
- describe the frequency and type of maintenance that should be performed on the printing machine
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to a semi-automatic printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP275 Automatically produce basic screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely produce one or two colour screen prints on an automatic printing machine

It applies to individuals working under direct supervision in the printing and graphic arts industry. They perform mainly routine tasks such as monitoring, adjusting and cleaning equipment, selecting appropriate products and ensuring set processes are followed in the use of an automatic printing machine.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Load substrate	1.1 Substrate is checked against job specifications, with any irregularities reported and rectified where possible 1.2 Substrate position and stencil registration are adjusted according to job specifications
2 Apply ink to screen	2.1 Ink is applied to screen in quantity required for screen size 2.2 Equipment is kept clean and spills are minimised

ELEMENT	PERFORMANCE CRITERIA
	2.3 Ink is checked against job specifications 2.4 Feeder is set and adjusted to suit substrate
3 Produce proof print	3.1 Proof print is run off and checked for colour, strength, registration, adhesion, clarity, gloss level, drying or curing, artwork detail and other technical aspects according to job specifications 3.2 Adjustments are made as required 3.3 Appropriate approval to commence production is sought prior to commencement 3.4 Belt speed and energy required are set to achieve desired properties and then printing speeds are adjusted to suit
4 Run job and monitor print quality	4.1 Printing speed production is adjusted to maximise quality and output 4.2 Print quality and sheet feeder are continuously evaluated and adjusted as required 4.3 Effects of ink alterations during run are monitored and appropriate action taken according to manufacturer or supplier and job specifications 4.4 Workplace documentation is completed as required 4.5 Curing and drying are constantly monitored and adjusted according to manufacturer or supplier and job specifications
5 Carry out routine user maintenance	5.1 Equipment is cleaned according to manufacturer or supplier specifications 5.2 Fault conditions are identified, reported and/or rectified according to enterprise procedures
6 Handle production output	6.1 Output is checked for thorough drying or curing before handling 6.2 Job status and progress are checked against job specifications and any necessary action is taken
7 Shut down machine	7.1 Excess ink, screens, squeegees and flood coaters are removed and cleaned according to work health and safety (WHS) requirements and manufacturer or supplier specifications 7.2 Waste materials are disposed of according to manufacturer or supplier specifications, regulatory requirements and enterprise procedures 7.3 Equipment and surrounding areas are cleaned according to manufacturer or supplier specifications and enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.3, 3.1, 4.3-4.5, 5.1, 5.2, 6.2, 7.1-7.3	- Evaluates and establishes job requirements from relevant information - Identifies correct process from enterprise procedures and manufacturer or supplier specifications
Writing	1.1, 4.4, 5.2	Completes required details accurately using enterprise specific and factual information
Oral Communication	3.3, 5.2	- Discusses faults and any remedial action with supervisor - Checks the progress and quality of the job with supervisor
Numeracy	2.1, 3.4, 4.1, 4.5	Uses simple mathematical calculations to determine curing and drying times and optimum belt speed
Navigate the world of work	7.1-7.3	- Takes personal responsibility for adherence to legal and regulatory requirements with specific reference to safety - Complies with organisational policies and procedures relevant to own role
Interact with others	3.3	Contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1, 1.2, 2.2, 2.3, 3.1, 3.2, 3.4, 4.1-4.3, 4.5, 5.1, 5.2, 6.1, 6.2	- Follows clearly defined instructions and sequencing - Monitors own progress for the task - Responds to predictable problems and implements standard or logical solutions - Takes responsibility for routine low-impact decisions within familiar situations - Understands the purpose of specific functions of some common digital tools used in work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP275 Automatically produce basic screen prints	ICPSP275C Automatically produce basic screen prints	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP275 Automatically produce basic screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely produce TWO complex prints of more than two colours containing line and tone using a semi-automatic machine according to manufacturer, job and enterprise specifications and procedures
- demonstrate use of control, monitoring and data entry systems.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe the adjustments that are necessary to the machine prior to setting up, including the maintenance on the machine and feeder
- identify the correct substrate to be used according to job specifications
- outline the procedure for checking the screen sequence of colours, ink, substrate and squeegee or flood coater prior to printing
- describe the system for setting the feed board and loading substrate, and the preparations needed prior to loading the feeder
- describe how to correctly position, register and lock the screen in position
- explain the need to adjust the off contact or peel-off requirements of the screen
- outline the work health and safety (WHS) requirements when working with infra-red or UV curing units
- explain the relationship between ink deposit, squeegee speed and belt speed and temperature of the drying or curing unit
- outline the routine maintenance undertaken on this drying or curing unit and the WHS concerns when maintaining and using an automatic printing machine
- describe the effect of humidity on the substrate

- explain the correct viscosity of the ink prior to and during printing and the effect that ink conditions have on output capacity
- outline the evaluation and maintenance of the print quality that takes place during the run
- discuss the ideal printing rate for this substrate on this machine
- outline the production output handling to prevent offsetting of the ink
- explain the need to determine the exact count of the output and to record production details on the job sheet
- describe the health hazards associated with ink or solvents
- outline the correct procedure for removing the ink without damaging the screen and cleaning squeegees or flood coaters, machine and surrounding area
- explain the maintenance that is required on this machine after printing
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to an automatic printing machine and more than two colours.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP281 Finish screen print products

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake finishing processes used on screen printed products not covered by converting, binding and finishing units. If the finishing is substantially guillotining, flat-bed cutting or folding, the relevant converting, binding and finishing units should be used.

It applies to individuals working under direct supervision in the printing and graphic arts industry. They perform mainly routine tasks such as monitoring, adjusting and cleaning equipment, selecting appropriate products and ensuring set processes are followed in the final stages of processing screen prints.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Receive printed product	1.1 Screen print job is collected or received and quality checks made according to job specifications 1.2 Defects or irregularities are identified, reported and rectified where possible
2 Carry out final	2.1 Final processing requirements of job are determined from job

ELEMENT	PERFORMANCE CRITERIA
processing	specifications 2.2 Equipment and materials for final processing are identified and prepared according to manufacturer or supplier and job specifications 2.3 Final processes are implemented according to job specifications and industry practice 2.4 Quality of product is monitored and maintained throughout final processing 2.5 Irregularities are identified, reported and rectified where possible 2.6 Job status and progress are checked against job specifications and any necessary action is taken
3 Handle final product	3.1 Final print is processed using appropriate handling, storage and dispatching techniques to ensure minimal wastage and prevent hazards to personnel 3.2 Waste materials are disposed of according to manufacturer or supplier specifications, regulatory requirements and enterprise procedures 3.3 Post-production cleaning and user maintenance are carried out according to manufacturer or supplier specifications
4 Store, pack and dispatch	4.1 Final quality checks are carried out and appropriate action is taken according to job specifications 4.2 Finished job is stored, packed and dispatched according to job specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1-2.3, 2.6, 3.2, 3.3, 4.1, 4.2	- Evaluates and establishes job requirements from relevant information - Identifies correct process from enterprise procedures and manufacturer or supplier specifications
Writing	1.2, 2.5	Completes required details accurately using enterprise specific and factual information

Oral Communication	1.2, 2.5	Reports faults and discusses any remedial action with supervisor
Navigate the world of work	2.3, 3.1-3.3	- Takes personal responsibility for adherence to legal and regulatory requirements with specific reference to safety - Complies with organisational policies and procedures relevant to own role
Get the work done	1.1, 1.2, 2.1-2.6, 4.1, 4.2	- Follows clearly defined instructions and sequencing and monitors own progress for the task - Responds to predictable problems and implements standard or logical solutions - Takes responsibility for routine low-impact decisions within familiar situations - Understands the purpose and some specific functions of common digital tools used in work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP281 Finish screen print products	ICPSP281C Finish screen print products	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP281 Finish screen print products

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- finish TWO different screen printed jobs and apply final processing requirements according to manufacturer and job specifications, and enterprise procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain techniques that are used to determine defects and irregularities and how they can be rectified
- outline the features of a quality screen printed job
- describe the health and safety concerns when finishing print jobs and handling the printed product
- list the equipment, tools and materials used for final processing and the processes that are undertaken as indicated in the job specifications
- describe monitoring and maintaining the quality of the finished product throughout final processing
- describe the handling techniques that are used to prevent damage to the processed product
- outline the correct methods for disposing of waste material
- explain the post-production cleaning methods that are used
- name the type and frequency of maintenance that should be performed on equipment
- outline the final quality checking methods
- explain the method used for maintaining and recording job information
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP282 Prepare film for basic screen printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare film for basic screen printing using appropriate equipment and Raster Image Processor (RIP) software.

It applies to individuals who generally work under direct supervision and perform mainly routine tasks such as operating basic equipment and assessing the production requirements in accordance with job specifications.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Assess production requirements	1.1 Requirements of printing process and job specification are assessed 1.2 Quality of job elements, including resolution or dots per inch (DPI) are maintained according to client requirements 1.3 Films, dye cartridges, qualities and process requirements are determined 1.4 Stock levels are checked, recorded and maintained according to

ELEMENT	PERFORMANCE CRITERIA
	job specifications 1.5 Copy is checked and assessed according to job specifications
2 Prepare and operate equipment	2.1 Scanner and computer is selected and artwork or copy is placed squarely in scanner 2.2 Scanner software is selected and correct settings are made according to job requirements 2.3 Previews are made, images selected, finished scan completed and image adjusted as required 2.4 Image format is determined and saved to storage device
3 Select and use appropriate software	3.1 Imaging software is selected and scan opened 3.2 Separation is provided on individual layers according to job specifications 3.3 Colours are excluded as required on separation layers 3.4 Separation layers are coloured for specific RIP software requirements 3.5 Image or layers or separations are manually nested if required in accordance with film output device size 3.6 Image format is determined according to RIP software requirements 3.7 Supplied finished artwork or separation is checked for output suitability
4 Select and operate appropriate equipment	4.1 RIP software is selected and opened 4.2 Image setter or dye printer is selected and checked, and heads cleaned prior to outputting images 4.3 Nesting is checked to ensure non-wastage of film 4.4 Image is evaluated against job specifications and corrected if required 4.5 Film is handled and output device is closed down according to manufacturer recommendations

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.4, 1.5, 2.2, 3.2, 4.4, 4.5	- Evaluates and establishes job requirements from relevant information - Identifies correct process from manufacturer or supplier instructions
Writing	1.4	Accurately records stock levels and information relating to job requirements
Navigate the world of work	4.5	Complies with organisational policies and procedures relevant to own role
Get the work done	1.1-1.5, 2.1-2.4, 3.1, 3.3-3.7, 4.1-4.4	- Follows clearly defined instructions and sequencing and monitors own progress for the task - Responds to predictable problems and implements standard or logical solutions - Takes responsibility for routine low-impact decisions within familiar situations - Understands the purpose and some specific functions of common digital tools

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP282 Prepare film for basic screen printing	ICPSP282C Prepare film for basic screen printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP282 Prepare film for basic screen printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare film for TWO different products involving a variety of image effects according to job and manufacturer specifications
- correctly select and use appropriate Raster Image Processor (RIP) software to meet the requirements of TWO jobs.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify image specifications and the resolutions or dots per inch (DPI) determination
- explain the scanner settings, including the adjusting of the image brightness or contrast
- identify the software used for scanning and the creation of vector graphics
- discuss the exclusion of colours and bleed for a particular job and the purpose of colouring separation layers
- explain the common file format when using RIP software and the settings that must be checked prior to ripping
- outline the nesting requirements of particular jobs and the output suitability prior to producing separations
- outline the correct output device and the regular checks and maintenance that must be performed on an image setter or dye printer
- outline the procedures used for evaluating the output film to ensure it conforms to job specifications.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to relevant facilities and equipment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP311 Reclaim screen manually

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to determine the suitability of screens to be reclaimed and the cleaning and storing of reclaimed screens.

It applies to individuals who may have to set up and operate power-driven or hand-operated screen printing machines. They may have to provide leadership and guidance to others and have some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Select and prepare chemicals	1.1 Ink and stencil type are correctly identified and screen is assessed for suitability to be reclaimed 1.2 Most appropriate reclamation method is selected 1.3 Screen reclamation chemicals are selected and prepared according to manufacturer or supplier specifications 1.4 Appropriate safety gear is selected and worn according to manufacturer or supplier specifications and work health and safety

ELEMENT	PERFORMANCE CRITERIA
	(WHS) requirements
2 Wash screen	2.1 Stencil is treated with appropriate chemical to manufacturer specifications 2.2 Screens are washed using pressure gun in suitably ventilated area with required extraction system 2.3 Stains and hazards are removed using appropriate chemicals according to manufacturer or supplier specifications and WHS requirements 2.4 Screens are checked for damage and any defects are reported and/or rectified according to enterprise procedures
3 Store screen	3.1 Screens are correctly identified and labelled 3.2 Screens are stored in clean, dry environment according to manufacturer or supplier specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 1.4, 2.1, 2.3, 2.4, 3.2	Interprets textual information from relevant sources to identify and adhere to procedures and standards
Writing	2.4, 3.1	Completes workplace documentation accurately and legibly using specific information
Oral Communication	2.4	Reports faults and discusses any remedial action with supervisor
Numeracy	1.3, 2.1	Recognises numerical information and makes basic calculations to determine measurements and timeframes
Navigate the world of work	1.4, 2.3, 2.4, 3.2	Understands and complies with legislative requirements and organisational policies and procedures relevant to own role
Get the work done	1.1-1.3, 2.2, 2.4, 3.1	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency - Automatically implements standard procedures for

		routine decisions • Recognises and takes responsibility for addressing predictable problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP311 Reclaim screen manually	ICPSP311C Reclaim screen manually	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP311 Reclaim screen manually

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely reclaim THREE screens, preferably of different mesh and stencil types commonly used in the workplace, using manual techniques, according to manufacturer and job specifications, enterprise procedures and work health and safety (WHS) requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the significance of mesh count
- explain how screens with different mesh counts should be treated
- describe the common faults that could occur in meshes and frames
- describe the ink removal procedures for three different inks
- describe the stencil removal procedures for two stencil types
- identify what chemicals are available for screen reclamation
- explain the reasons for selecting chemicals and method for screen reclamation
- explain the main considerations when handling and disposing of chemicals
- explain the various screen reclamation techniques available in the industry
- explain the reasons for selecting and applying a specific technique for screen reclamation
- identify the hazards to be aware of in reclaiming screens
- describe the enterprise policies on material handling
- describe the enterprise policies on management of waste
- name any personal protective clothing that should be worn when reclaiming screens
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to relevant tools, equipment, materials, resources and documentation.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP333 Automatically prepare direct emulsion stencil

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to select, prepare, coat and store direct emulsion stencils using automatic coating equipment.

It applies to individuals working in the printing and graphic arts industry who may have to set up and operate power-driven or hand-operated screen printing machines. They may have to provide leadership and guidance to others and have some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare work area and equipment	1.1 Work area is made clean and functional prior to commencement of work 1.2 Equipment is inspected to ensure it is functional and, where necessary, appropriate remedial action is taken prior to commencement of work 1.3 Appropriate coating troughs for automatic coaters are selected, ensuring they are free of nicks and burrs

ELEMENT	PERFORMANCE CRITERIA
	1.4 Automatic coating equipment is inspected and routine user maintenance is carried out according to manufacturer instructions and enterprise procedures 1.5 Automatic coating equipment is adjusted to suit screen frame and mesh and emulsion
2 Prepare screen	2.1 Screen is selected according to job specifications 2.2 Chemicals are applied and removed according to work health and safety (WHS) requirements and manufacturer or supplier specifications 2.3 Tension of screen mesh is checked for suitability according to job specifications
3 Select emulsion	3.1 Emulsion is selected according to requirements for ink type, print resolution, substrate, mesh type and machine type 3.2 Emulsion is checked for expiry date and appropriate action taken 3.3 Emulsion is prepared according to WHS requirements and manufacturer or supplier specifications 3.4 Emulsion is used and dried according to manufacturer or supplier specifications
4 Process coated screen	4.1 Coated screen frame is placed in vacuum frame and adequately vacuumed with positive positioned according to manufacturer or supplier specifications 4.2 Light source is positioned according to manufacturer or supplier specifications 4.3 Exposure is calculated and stencil exposed according to manufacturer or supplier specifications 4.4 Exposed screen is removed from vacuum frame Exposed screen is washed after positive removal according to 4.5 WHS requirements and manufacturer or supplier specifications 4.6 Processed stencil or screen is inspected for flaws
5 Store screen	5.1 Prepared screen is labelled according to enterprise specifications 5.2 Prepared screen is stored in clean, dry environment according to manufacturer or supplier specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.4, 2.1-2.3, 3.2-3.4, 4.1-4.3, 4.5, 5.1, 5.2	- Establishes job requirements from relevant information - Identifies correct process from procedural documentation
Writing	5.1	Completes routine labelling associated with production processes and enterprise procedures
Numeracy	4.3	Uses simple mathematical calculations to determine required exposure time
Navigate the world of work	1.4, 2.2, 3.3, 4.5, 5.2	Understands and complies with legislative requirements and organisational procedures relevant to own role
Get the work done	1.1-1.3, 1.5, 2.1, 2.3, 3.1, 3.2, 4.1, 4.2, 4.4, 4.6	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency - Automatically implements standard procedures for routine decisions - Recognises and takes responsibility for addressing predictable problems in familiar work contexts - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks, adapting some functions to improve efficiency

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP333 Automatically prepare direct emulsion stencil	ICPSP333C Automatically prepare direct emulsion stencil	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP333 Automatically prepare direct emulsion stencil

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly prepare TWO different direct emulsion stencils using automatic coating equipment
- expose, wash and dry the screen according to manufacturer and job specifications, enterprise procedures and occupational health and safety requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe the influence that the mesh count has on the final printed product
- outline the importance of correct screen tension
- explain the different tensions required for screens of various mesh counts and grades
- outline the degreasing or cleaning techniques that are employed prior to coating the screen
- describe information that is contained in material safety data sheets (MSDS) for the emulsion being used
- identify the work health and safety (WHS) requirements that need to be considered for exposure to UV light sources
- identify the pollution and environmental issues that need to be considered when working with emulsions
- outline the maintenance that is required for the automatic coating machine
- describe two different emulsions used in screen printing and outline their characteristics, their shelf life and areas of use
- discuss the preparation formula for one emulsion and its storage requirements
- describe the need to have the correct illumination in the work area

- discuss the influence that the length of run and ink or dye being used have on the coating technique, the number of coats of emulsion and the best method of coating the screen
- outline the factors that are taken into consideration to determine the angle at which the coaters coat the screen
- describe the appropriate position (horizontal or vertical) for drying the screen and the effect that each of these positions has on the way the emulsion dries
- describe the effect of heat on the emulsion during the drying process and the function and use of a light integrator
- describe the procedure for exposing the stencil and the effect that the position, angle and distance of the light source have on the exposure process
- describe the importance of perfect contact between positive and screen during exposure
- identify the effect that temperature, pressure and time taken have on the washing out process and wash-out completion
- identify the ideal position of the screen for drying to prevent scum and streaking and the impact of post-curing on the stencil
- describe information obtained from the MSDS for this particular blackout
- identify the bearing of ink to be used on a particular stencil and the type of stencil on the type of blackout
- name the preventive measures that can be taken to minimise pinholes
- explain the importance of taping the edge of the frame and the squeegee edge, and the means used to identify the screen at a later date
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source
- explain where you might find other relevant sources of information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to chemicals and relevant equipment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP337 Prepare stencil using photographic capillary method

Modification History

Release	Comments
Release 2	This version first released with ICP Printing and Graphic Arts Training Package Version 1.1. Version created to correct mapping table information.
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to select, prepare, process and store photographic capillary stencils.

It applies to individuals working in the printing and graphic arts industry who may have to set up and operate power-driven or hand-operated screen printing machines. They may have to provide leadership and guidance to others and have some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare work area	1.1 Work area is made clean and functional prior to commencement of work 1.2 Equipment is inspected to ensure it is functional and, where

ELEMENT	PERFORMANCE CRITERIA
	necessary, appropriate remedial action is taken prior to commencement of work 1.3 Chemicals are prepared, if necessary, according to work health and safety (WHS) requirements and manufacturer or supplier specifications
2 Prepare screen	2.1 Screen is selected according to job specifications 2.2 Chemicals are applied and removed according to WHS requirements and manufacturer or supplier specifications
3 Select and process capillary film	3.1 Capillary film is selected according to requirements for ink type, print resolution, substrate and machine type with minimisation of waste 3.2 Capillary film is cut to size according to WHS requirements and manufacturer or supplier specifications with minimisation of waste 3.3 Capillary film is mounted on screen according to manufacturer or supplier specifications 3.4 Screen is dried according to manufacturer or supplier specifications and enterprise procedures 3.5 Backing sheet is removed according to manufacturer or supplier specifications
4 Process material	4.1 Screen is placed in vacuum frame with positive positioned according to manufacturer or supplier specifications and job specifications 4.2 Exposure is calculated and stencil exposed according to manufacturer or supplier specifications 4.3 Light source is positioned according to manufacturer or supplier specifications 4.4 Exposed screen is removed from vacuum frame according to WHS requirements and manufacturer or supplier specifications 4.5 Exposed screen is washed out according to WHS requirements and manufacturer or supplier specifications
5 Dry stencil	5.1 Processed stencil is dried according to manufacturer or supplier specifications 5.2 Backing sheet is carefully removed and stencil checked for full adhesion
6 Block out screen	6.1 Stencil is inspected for flaws, scum and orientation 6.2 Non-image areas of prepared screen are blocked out with filler

ELEMENT	PERFORMANCE CRITERIA
	suitable for ink type and according to job specifications 6.3 Pinholes are spotted out with suitable filler and faulty or damaged images are retouched and taped according to ink type and job specifications
7 Store screen	7.1 Prepared screen is labelled according to enterprise specifications 7.2 Prepared screen is stored in clean, dry environment according to manufacturer or supplier specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 2.1, 2.2, 3.3-3.5, 4.1-4.5, 5.1, 6.2, 6.3, 7.1, 7.2	- Establishes job requirements from relevant information - Identifies correct process from procedural documentation
Writing	7.1	Completes routine labelling associated with production processes and enterprise procedures
Numeracy	3.2, 3.4, 4.2	Uses simple mathematical calculations to determine required exposure time for the screen and product sizes
Navigate the world of work	1.3, 2.1, 2.2, 3.2, 4.4, 4.5, 7.2	Understands and complies with legislative requirements and organisational policies and procedures relevant to own role
Get the work done	1.1-1.3, 2.1, 3.1, 3.3, 4.1, 4.3-4.5, 5.1, 5.2, 6.1-6.3	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency - Automatically implements standard procedures for routine decisions - Recognises and takes responsibility for addressing predictable problems in familiar work contexts - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks, adapting some functions to improve efficiency

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP337 Prepare stencil using photographic capillary method	ICPSP337D Prepare stencil using photographic capillary method	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP337 Prepare stencil using photographic capillary method

Modification History

Release	Comments
Release 2	This version first released with ICP Printing and Graphic Arts Training Package Version 1.1. Version created to correct mapping table information.
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly prepare TWO different direct screens using automatic coating equipment and expose, wash and dry the screen according to all manufacturer, job, enterprise and workplace safety requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline work health and safety (WHS) requirements when degreasing screens
- identify the significance of the mesh count and the selection of mesh count for the application of a capillary stencil
- discuss the impact of correct tension on the screen
- identify the chemicals that are used for degreasing screens
- outline the maintenance procedures that are employed for equipment in the stencil preparation area
- describe the peculiarities of photographic capillary stencils and the selection process
- identify pollution and environmental concerns to be addressed when working with capillary films
- identify wetting agents that are used to facilitate the application of the film to the screen
- outline problems that are caused by dust on the surface of the mesh

- discuss the importance of the position of film on the screen, the problems that can occur from poor or incorrect mounting techniques and how they can be rectified
- outline WHS concerns related to exposing stencils
- describe the correct drying distance and drying time, how these are calculated and the effects of incorrect drying temperatures
- discuss the need to dry film under safelight conditions and the function and use of a light integrator
- outline the removal of the backing sheet
- describe the effect that the position, angle and distance of the light source has on the exposure process
- outline the effect that temperature, pressure and time taken has on the washing out process
- describe the importance of blotting up excess water from the stencil to prevent scum and streaking
- outline how to determine when a stencil is dry
- explain how the ink and stencil types affect the blackout
- outline preventive measures that can be taken to prevent pinholes, and the importance of taping the edge of the frame
- describe how a screen can be identified at a later date
- identify maintenance that should be carried out on exposing, washing and drying equipment
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to chemicals and relevant equipment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP339 Prepare stencil using direct projection method

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to select, prepare, process and store photographic capillary stencils.

It applies to individuals working in the printing and graphic arts industry who may have to set up and operate power-driven or hand-operated screen printing machines, and who may have to provide leadership and guidance to others and have some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare work area	1.1 Work area is made clean and functional prior to commencement of work 1.2 Equipment is inspected to ensure it is functional and, where necessary, appropriate remedial action is taken prior to commencement of work 1.3 Chemicals are prepared, if necessary, according to work health and safety (WHS) requirements and manufacturer or supplier

ELEMENT	PERFORMANCE CRITERIA
	specifications 1.4 Appropriate coating trough (or troughs for automatic coaters) is selected, ensuring it is free of nicks and burrs
2 Prepare screen	2.1 Screen is selected according to job specifications 2.2 Chemicals are applied and removed according to WHS requirements and manufacturer or supplier specifications
3 Select emulsion	3.1 Emulsion is selected according to requirements for ink type, print resolution, substrate, mesh type and machine type with minimisation of waste 3.2 Emulsion is checked for expiry date and appropriate action taken 3.3 Emulsion is prepared according to WHS requirements, and manufacturer or supplier specifications 3.4 Emulsion is used and dried according to manufacturer or supplier specifications
4 Process material	4.1 Coated screen is positioned on projection frame holder according to manufacturer or supplier specifications 4.2 Projection light source equipment is positioned according to manufacturer or supplier specifications 4.3 Positive is positioned into projection light source which is then set to desired enlargement according to manufacturer or supplier specifications 4.4 Exposed screen is removed from positioning frame according to WHS requirements and manufacturer or supplier specifications 4.5 Exposed screen is washed out according to WHS requirements and manufacturer or supplier specifications 4.6 Processed stencil or screen is inspected for processing flaws
5 Dry stencil	5.1 Processed stencil is dried according to manufacturer or supplier specifications 5.2 Backing sheet is carefully removed and stencil checked for full adhesion
6 Block out screen	6.1 Non-image areas of prepared screen are blocked out with filler suitable for ink type and according to job specifications 6.2 Stencil is inspected for flaws, scum and orientation 6.3 Pinholes are spotted out with suitable filler and taped according to ink type and job specifications

ELEMENT	PERFORMANCE CRITERIA
7 Store screen	7.1 Prepared screen is labelled according to enterprise specifications 7.2 Prepared screen is stored in clean, dry environment according to manufacturer or supplier specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 2.1, 2.2, 3.2-3.4, 4.1-4.5, 5.1, 6.1, 7.2	- Establishes job requirements from relevant information - Identifies correct process from procedural documentation
Writing	7.1	Completes routine labelling associated with production and enterprise processes
Numeracy	1.3, 4.3	Uses simple mathematical processes to calculate amounts of chemicals and coating times
Navigate the world of work	1.3, 2.2, 3.3, 4.4, 4.5, 7.1, 7.2	Complies with organisational, legal and regulatory requirements related to own work, with specific reference to safety
Get the work done	1.1, 1.2, 1.4, 2.1, 3.1, 3.2, 3.4, 4.1-4.6, 5.1, 5.2, 6.1-6.3	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency - Automatically implements standard procedures for routine decisions - Recognises and takes responsibility for addressing predictable problems in familiar work contexts - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP339 Prepare stencil using direct projection method	ICPSP339C Prepare stencil using direct projection method	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP339 Prepare stencil using direct projection method

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely prepare TWO different screens using the direct projection method according to all job, manufacturer, enterprise and work health and safety (WHS) requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify the influence that mesh count has on final printed product
- explain the importance of correctly tensioned screen and describe the tension that is required on screens of various mesh count or grades
- describe the degreasing or cleaning techniques that are employed prior to coating the screen
- summarise the information contained in the material safety data sheet (MSDS) about emulsion
- discuss the pollution and environmental issues that need to be considered when working with emulsions
- identify the maintenance that is required on the direct projection camera
- outline the importance of working in a safelight area when using the direct projection method
- describe the kinds of high sensitivity emulsions that are available and explain their characteristics, lifespans and areas of use, including the preparation method for the emulsion being used
- identify the influence that length of run and ink being used have on the coating technique

- identify the number of coats of emulsion and the best method of coating the screen, as well as the best position (horizontal or vertical) for drying the screen to prevent scum and streaking
- identify the effect of heat on the emulsion during the drying process
- outline health and safety concerns when exposing the screen
- describe the operating features of the direct projection camera
- explain how to set the enlargement factor and take into account registration on the frame for the appropriate printing machine
- describe the exposure techniques and procedures that are used and how to calculate exposure time
- identify the effect of temperature, pressure and period of washing on the emulsion, including how to determine when washing out is complete
- outline the post-curing effect on the stencil
- summarise the information that is obtained from the MSDSs for a particular blackout
- explain how ink and stencil type influence the choice of blackout
- outline the preventive measures that can be taken to minimise pinholes and the importance of taping the edge of the frame
- describe how a screen can be identified at a later date
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to direct electronic imaging equipment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP341 Prepare stencil using direct electronic imaging method

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to select, prepare, process and store direct electronically imaged stencils.

It applies to individuals working in the printing and graphic arts industry who may have to set up and operate power-driven or hand-operated screen printing machines. They may have to provide leadership and guidance to others and have some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare work area	1.1 Work area is made clean and functional prior to commencement of work 1.2 Equipment is inspected to ensure it is functional and, where necessary, appropriate remedial action is taken prior to commencement of work 1.3 Chemicals are prepared, if necessary, according to work health

ELEMENT	PERFORMANCE CRITERIA
	and safety (WHS) requirements and manufacturer or supplier specifications 1.4 Appropriate coating trough (or troughs for automatic coaters) is selected, ensuring it is free of nicks and burrs
2 Prepare screen	2.1 Screen is selected according to job specifications 2.2 Chemicals are applied and removed according to WHS requirements and manufacturer or supplier specifications
3 Select direct emulsion	3.1 Emulsion is selected according to requirements for ink type, print resolution, substrate, mesh type and machine type with minimisation of waste 3.2 Emulsion is checked for expiry date and appropriate action taken 3.3 Emulsion is prepared according to WHS requirements and manufacturer or supplier specifications 3.4 Emulsion is used and dried according to manufacturer or supplier specifications
4 Process material	4.1 Coated screen is placed in direct imaging equipment according to manufacturer or supplier specifications 4.2 Direct imaging equipment is set up according to manufacturer or supplier and job specifications 4.3 Direct imaging equipment is operated according to WHS requirements, and manufacturer or supplier specifications 4.4 Exposed screen is removed and washed out according to WHS requirements and manufacturer or supplier specifications 4.5 Processed stencil or screen is inspected for processing flaws
5 Dry stencil	5.1 Processed stencil is dried according to manufacturer or supplier specifications 5.2 Backing sheet is carefully removed and stencil checked for full adhesion
6 Block out screen	6.1 Non-image areas of prepared screen are blocked out with filler suitable for ink type according to job specifications 6.2 Stencil is inspected for flaws, scum and orientation 6.3 Pinholes are spotted out with suitable filler and taped according to ink type and job specifications
7 Store screen	7.1 Prepared screen is labelled according to enterprise specifications 7.2 Prepared screen is stored in clean, dry environment according to

ELEMENT	PERFORMANCE CRITERIA
	manufacturer or supplier specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 2.1, 2.2, 3.1-3.4, 4.1-4.5, 5.1, 6.1, 7.2	- Establishes job requirements from relevant information - Identifies correct process from procedural documentation
Writing	7.1	Completes routine labelling associated with production processes and enterprise procedures
Numeracy	1.3, 4.3	Uses simple mathematical calculations to mix chemicals and calculate coating time
Navigate the world of work	1.3, 2.2, 3.3, 4.4, 4.5, 7.1, 7.2	Complies with organisational, legal and regulatory requirements related to own work, with specific reference to safety
Get the work done	1.1, 1.2, 1.4, 2.1, 3.1, 3.2, 3.4, 4.1-4.6, 5.1, 5.2, 6.1- 6.3	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency - Automatically implements standard procedures for routine decisions - Recognises and takes responsibility for addressing predictable problems in familiar work contexts - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP341 Prepare stencil using direct electronic imaging method	ICPSCP341C Prepare stencil using direct electronic imaging method	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP341 Prepare stencil using direct electronic imaging method

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely prepare TWO different screens using direct electronic imaging techniques according to all manufacturer, job, enterprise and health and safety requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the influence that mesh count has on the final printed product
- identify the need to have a correctly tensioned screen and the effect of screen tension on screens of various mesh count or grades
- identify the degreasing or cleaning techniques that are employed prior to coating the screen
- describe the information that is contained in the material safety data sheet (MSDS) for the emulsion
- identify pollution and environmental issues that need to be considered when working with emulsions, including the need to work in a safelight area
- describe maintenance that is required on the direct projection camera
- discuss the kinds of high sensitivity emulsion that are available and state their characteristics, lifespans and areas of use
- outline the preparation method for the emulsion used
- describe the influence that the length of run and ink used have on the coating technique
- discuss the number of coats of emulsion necessary and the best method of coating the screen
- identify the best position (horizontal or vertical) for drying the screen to prevent scum and streaking

- describe the effect of heat on the emulsion during the drying process
- outline the health and safety concerns when exposing the screen
- describe the operating features of the direct projection camera
- describe the best position on the frame, the registration requirements and the scanning speed and exposure time
- summarise inputting information into the computer, manipulation of the image and how to interpret output information
- describe the effect of temperature, pressure and period of washing on the emulsion, as well as determining when washing out is complete
- describe the post-curing effect on the stencil
- outline the main information in the MSDS for a particular blackout
- identify the correct ink and stencil for the type of blackout to be used
- identify preventive measures required to minimise pinholes
- describe the means by which a screen can be identified at a later date
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to direct electronic imaging equipment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP351 Prepare machine and drying/curing unit

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare a manual, semi-automatic or automatic machine for printing and set up drying and/or curing units.

It applies to individuals working in the printing and graphic arts industry who may have to set up and operate power-driven or hand-operated screen printing machines. They may have to provide leadership and guidance to others and have some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Inspect screen	1.1 Screen frames are identified to determine colour sequence 1.2 Each screen frame is examined for defects and appropriate action taken 1.3 Each screen is taped as necessary 1.4 Screens are inspected against film positives, variations in centring, registration and alignment are noted, and appropriate action

ELEMENT	PERFORMANCE CRITERIA
	is taken 1.5 Screen frame, mesh and stencil are appropriately handled according to manufacturer or supplier specifications to prevent damage and hazards to personnel
2 Maintain and adjust machine	2.1 Machine is inspected and routine user maintenance is carried out according to manufacturer or supplier specifications and enterprise procedures 2.2 Required periodic adjustments and user maintenance items are made at correct times according to manufacturer or supplier specifications and enterprise procedures
3 Install screen frames and dry run machine	3.1 Laysheet is positioned in grippers and side-lay according to manufacturer or supplier specifications 3.2 Image position is established on laysheet 3.3 Screen frame is positioned in screen frame holder 3.4 Registration, alignment and centring are confirmed and screen clamps tightened to ensure no movement of the frame according to manufacturer or supplier specifications 3.5 Machine is run through printing cycle at same time, ensuring that substrate registers in lays and appropriate action is taken
4 Prepare and position flood bar and squeegees	4.1 Flood bar (for semi-automatic and automatic machines) and correct squeegee are assembled according to manufacturer or supplier specifications, ensuring that flood bar is free of nicks and burrs 4.2 Squeegee blade is sharpened according to manufacturer or supplier specifications and considering ink system to be used 4.3 Flood bar (for semi-automatic and automatic machines) and squeegee are positioned according to job specifications with squeegee at correct pre-determined angle 4.4 On and off contact (and peel-off if available) is adjusted to suit ink system and printing speed according to manufacturer or supplier specifications 4.5 Squeegee is correctly adjusted and brought into contact with substrate
5 Set up drying or curing unit	5.1 Belt speed and energy required are set to achieve desired properties and then printing speeds are adjusted accordingly 5.2 Stock is properly stacked at end of dryer

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.5, 2.1, 2.2, 3.1, 3.4, 4.1-4.4	Establishes job requirements from relevant information
Numeracy	4.3, 4.4, 5.1	Uses simple mathematical calculations to determine and adjust resources and equipment
Navigate the world of work	1.5, 2.1, 2.2	- Complies with legislative requirements and organisational policies and procedures - Considers own role in terms of its contribution to broader goals of the work environment
Get the work done	1.1-1.4, 2.2, 3.1-3.5, 4.1, 4.2, 4.5, 5.2	- Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks, adapting some functions to improve personal efficiency - Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency - Automatically implements standard procedures for routine decisions - Recognises and takes responsibility for addressing predictable problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP351 Prepare machine and drying/curing unit	ICPSP351C Prepare machine and drying/curing unit	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP351 Prepare machine and drying/curing unit

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly prepare a machine for printing TWO different jobs by installing the screen frame and squeegee or flood coater and setting up a drying or curing unit to achieve the desired properties, according to manufacturer, job, enterprise and health and safety requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify the colour sequence of screens and defects identified when examining the screen and stencil
- name the variation between the positive and stencil
- outline the health and safety concerns when using drying or curing units
- outline the maintenance that is required on this equipment, including the periodic adjustments that are made to the drying or curing units
- identify different machine capabilities and characteristics
- describe the function of the printing base
- describe the position of the lay sheet on the printing base and the image position on the lay sheet
- name the type of lay sheet being used
- describe the position of the frame in the frame holder, and registering and alignment of the stencil with the image on the lay sheet
- outline the checks that are required to maintain register
- describe the characteristics of a good squeegee blade or flood coater
- discuss the significance of shore hardness of squeegee material and the length of squeegee or flood coater

- outline the positioning, fixing and adjustment of the squeegee or flood coater and the relationship of the squeegee to the flood coater
- describe the adjustment of on and off contact distance and peel-off requirements of the screen frame
- identify the relationship of the machine stroke to off contact or peel-off requirements
- outline the adjustments that are required to the unit for and during drying or curing
- discuss the effects of temperature on the substrate
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP371 Manually produce complex screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manually produce three or more colour screen prints.

It applies to individuals working in the printing and graphic arts industry who may have to set up and operate power-driven or hand-operated screen printing machines. They may have to provide leadership and guidance to others and have some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Load substrate	1.1 Substrate is checked against job specifications with any irregularities reported and rectified where possible 1.2 Substrate position and stencil registration are adjusted according to job specifications
2 Apply ink to screen	2.1 Ink is applied to screen in quantity required for screen size 2.2 Equipment is kept clean and spills are minimised

ELEMENT	PERFORMANCE CRITERIA
	2.3 Colour is mixed and ink is checked against job specifications
3 Produce proof print	3.1 Proof print is run off and checked for colour, strength, registration, adhesion, clarity, gloss level, drying or curing, artwork detail and other technical aspects according to job specifications 3.2 Adjustments are made as required 3.3 Appropriate approval to commence production is sought prior to commencement 3.4 Belt speed and energy required are set to achieve desired properties
4 Run job and monitor print quality	4.1 Printing speed production is adjusted to maximise quality and output 4.2 Print quality is continuously evaluated and adjusted as required 4.3 Effects of ink alterations during run are monitored and appropriate action taken according to manufacturer or supplier and job specifications 4.4 Workplace documentation is completed as required 4.5 Curing and drying are constantly monitored and adjusted according to manufacturer or supplier and job specifications
5 Carry out routine user maintenance	5.1 Equipment is lubricated, cleaned and adjusted according to manufacturer or supplier specifications 5.2 Fault conditions are identified and reported according to enterprise procedures
6 Stack production output	6.1 Output is checked for thorough drying or curing before stacking 6.2 Job status and progress are checked against job specifications and any necessary action is taken
7 Finish operation	7.1 Excess ink, screens, squeegees and flood coaters are removed and cleaned according to work health and safety (WHS) requirements and manufacturer or supplier specifications 7.2 Waste materials are disposed of according to manufacturer or supplier specifications, regulatory requirements and enterprise procedures 7.3 Equipment and surrounding areas are cleaned according to manufacturer or supplier specifications and enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.3, 4.3-4.5, 5.1, 6.2, 7.1-7.3	- Establishes job requirements from relevant information - Identifies correct processes from procedural documentation
Writing	1.1, 4.4, 5.2	- Records information relating to outcomes of job requirements - Records information relating to machinery problems
Oral Communication	1.1, 3.3	Checks the progress and quality of the job with supervisor
Numeracy	2.1, 3.4, 4.5	Uses simple mathematical calculations to determine and adjust resources and equipment
Navigate the world of work	5.2, 7.1-7.3	Complies with organisational, legal and regulatory requirements related to own work with specific reference to safety
Get the work done	1.1, 1.2, 2.2, 2.3, 3.1, 3.2, 4.1-4.3, 4.5, 5.1, 5.2, 6.1, 6.2	- Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency - Automatically implements standard procedures for routine decisions - Recognises and takes responsibility for addressing predictable problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP371 Manually produce complex screen prints	ICPSP371C Manually produce complex screen prints	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP371 Manually produce complex screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate an ability to find and use information relevant to the task from a variety of information sources
- safely produce TWO different three or more colour screen prints manually according to job, manufacturer, enterprise and health and safety requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline criteria for selecting the correct substrate for the job
- summarise ink and substrate compatibility
- describe the characteristics of solvents and ink additives and the best method to determine their compatibility
- outline the method that is used for checking the screen, ink, substrate and selection of squeegee prior to printing
- describe the routine maintenance that is required on the printing base
- explain lay edge on the equipment
- describe the correct position, register and process of locking the screen in position
- explain off contact distance
- describe the selection of a drying or curing system
- describe the process for calculating the ideal belt speed for a print run
- list the health and safety concerns when producing a manual print
- explain the need to condition some substrates
- outline the procedure for checking the correct viscosity of ink during the print run and ways of rectifying any problems

- outline the evaluation process and maintenance of print quality during the run
- describe the procedure for checking and stacking production output
- describe the correct method of cleaning squeegees, equipment and the surrounding area
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source
- describe other sources of available information that are relevant to the job.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include use of cleaning chemicals and manual printing machines.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP373 Semi-automatically produce complex screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce complex screen prints of two or more colours using semi-automatic machines.

It applies to individuals working in the printing and graphic arts industry who may have to set up and operate power-driven or hand-operated screen printing machines. They may have to provide leadership and guidance to others and have some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Load substrate	1.1 Substrate is checked against job specifications with any irregularities reported and rectified where possible 1.2 Substrate position and stencil registration are adjusted according to job specifications
2 Apply ink to screen	2.1 Ink is applied to screen in quantity required for screen size 2.2 Equipment is kept clean and spills are minimised

ELEMENT	PERFORMANCE CRITERIA
	2.3 Colour is mixed and ink is checked against job specifications
3 Produce proof print	3.1 Proof print is run off and checked for colour, strength, registration, adhesion, clarity, gloss level, drying or curing, artwork detail and other technical aspects according to job specifications 3.2 Adjustments are made as required 3.3 Appropriate approval to commence production is sought prior to commencement 3.4 Belt speed and energy required are set to achieve desired properties
4 Run job and monitor print quality	4.1 Printing speed production is adjusted to maximise quality and output 4.2 Print quality is continuously evaluated and adjusted as required 4.3 Effects of ink alterations during run are monitored and appropriate action taken according to manufacturer or supplier and job specifications 4.4 Workplace documentation is completed as required 4.5 Curing and drying are constantly monitored and adjusted according to manufacturer or supplier and job specifications
5 Carry out routine user maintenance	5.1 Equipment is lubricated, cleaned and adjusted according to manufacturer or supplier specifications 5.2 Fault conditions are identified and reported according to enterprise procedures
6 Stack production output	6.1 Output is checked for thorough drying or curing before stacking 6.2 Job status and progress are checked against job specifications and any necessary action is taken
7 Shut down machine	7.1 Excess ink, screens, squeegees and flood coaters are removed and cleaned according to work health and safety (WHS) requirements and manufacturer or supplier specifications 7.2 Waste materials are disposed of according to manufacturer or supplier specifications, regulatory requirements and enterprise procedures 7.3 Equipment and surrounding areas are cleaned according to manufacturer or supplier specifications and enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.3, 3.1, 4.3-4.5, 5.1, 6.2, 7.1-7.3	- Establishes job requirements from relevant information - Identifies correct process from procedural documentation
Writing	1.1, 4.4, 5.2	Records information relating to job outcomes and problems with machinery
Oral Communication	1.1, 3.3	Checks the progress and quality of the job with supervisor
Numeracy	2.1, 3.4, 4.5	Uses simple mathematical calculations to determine and adjust resources and equipment
Navigate the world of work	5.2, 7.1-7.3	Complies with organisational, legal and regulatory requirements related to own work with specific reference to safety
Get the work done	1.1, 1.2, 2.2-2.4, 3.1, 3.2, 4.1-4.3, 4.5, 5.1, 5.2, 6.1, 6.2	- Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency - Automatically implements standard procedures for routine decisions - Recognises and takes responsibility for addressing predictable problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP373 Semi-automatically produce complex screen prints	ICPSCP373 Semi-automatically produce complex screen prints	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP373 Semi-automatically produce complex screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely produce TWO complex prints of two or more colours containing line and tone using a semi-automatic machine according to job, manufacturer, enterprise and health and safety requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe the criteria for selecting the correct substrate for the job
- discuss the selection of ink and solvents and substrate compatibility
- describe necessary machine adjustments prior to setting up and the maintenance required prior to the commencement of printing
- outline the procedure for checking the screen sequence of colours, ink, substrate and squeegee or flood coater prior to printing
- describe the function of the printing base and maintenance that is required
- summarise how to determine the lay edge and gripper or take-off edge of the substrate
- discuss the correct positioning, registering and process for locking the screen in position
- describe the selection of the squeegee or shore hardness and flood coater to be used
- explain the need to adjust the off contact or peel-off requirements of the screen
- outline the choice of belt speed and the impact of environmental conditions on the unit and the output capacity
- discuss health and safety concerns when using a semi-automatic machine, chemicals and infra-red or UV curing units
- outline the process for monitoring and rectifying ink viscosity during a production run
- describe the process of evaluation and maintenance of the print quality during the run

- discuss the ideal printing rate for this substrate on this machine
- describe the stacking and handling of production output
- discuss the importance of determining the exact print count and recording production details on the job sheet
- describe the health hazards associated with inks and solvents
- outline the correct method of cleaning squeegees or flood coater machine and surrounding area and removing ink without damaging the screen
- describe the maintenance that is required on the machine after printing
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to cleaning chemicals and semi-automatic printing machines.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP374 Operate a semi-automatic screen printing machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce a print on a range of common substrates, using semi-automatic equipment and screening techniques.

It applies to individuals working in the printing and graphic arts industry who may have to set up and operate power-driven or hand-operated screen printing machines. They may have to provide leadership and guidance to others and have some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Identify job requirements	1.1 Substrate is checked against job specifications with any irregularities reported and rectified where possible 1.2 Ink is checked against job specifications 1.3 Stencil is checked against job specifications
2 Prepare machine to print	2.1 Substrate position and stencil registration are adjusted according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	2.2 Ink is applied to screen in quantity required for screen size 2.3 Equipment is kept clean and spills are minimised
3 Produce proof print	3.1 Proof print is run off and checked for colour, strength, registration, adhesion, clarity, gloss level, drying or curing, artwork detail and other technical aspects according to job specifications 3.2 Adjustments are made according to product and machine specifications 3.3 Belt speed and energy required are set to achieve desired curing or drying properties 3.4 Appropriate approval to commence production is sought prior to commencement
4 Run job and monitor print quality	4.1 Printing speed production is adjusted to maximise quality and output 4.2 Print quality is continuously evaluated and adjusted as required 4.3 Effects of ink alterations during run are monitored and any discrepancy is notified according to enterprise procedures 4.4 Workplace documentation is completed as required 4.5 Curing and drying are constantly monitored and adjusted according to manufacturer or supplier and job specifications
5 Carry out routine user maintenance	5.1 Equipment is cleaned according to enterprise procedures 5.2 Fault conditions are identified and reported according to enterprise procedures
6 Stack production output	6.1 Output is checked for thorough drying or curing before stacking 6.2 Job identification is labelled and recorded 6.3 Job status and progress are checked against job specifications and any necessary action is taken
7 Conduct shutdown of production process	7.1 Material is transferred to correct destination in safe manner 7.2 Excess ink, screens, squeegees and flood coaters are removed and cleaned according to work health and safety (WHS) requirements and manufacturer or supplier specifications 7.3 Waste materials and chemicals are disposed of according to manufacturer or supplier specifications, regulatory requirements and enterprise procedures 7.4 Equipment and surrounding areas are cleaned according to manufacturer or supplier specifications and enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
	7.5 Tools and equipment are stored and maintained according to manufacturer or supplier to ensure ease of access and operator safety 7.6 Correct procedure for dealing with spilt chemicals is demonstrated according to WHS requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 4.4, 4.5, 6.2, 6.3, 7.3-7.5	Establishes job requirements and correct processes from relevant information
Writing	1.1, 4.3, 4.4, 5.2, 6.2	Records information relating to job outcomes and machinery problems
Oral Communication	1.1, 3.4	Checks the progress and quality of the job with supervisor
Numeracy	2.2, 3.3, 4.1, 4.5	Uses simple mathematical calculations to determine drying time and optimum belt speed
Navigate the world of work	4.5, 5.1, 5.3, 6.2, 7.1-7.6	Complies with organisational, legal and regulatory requirements related to own work with specific reference to safety
Get the work done	1.1-1.3, 2.1-2.4, 3.1, 3.2, 4.2, 4.3, 4.5, 5.1, 5.2, 6.1, 6.3	- Understands the purposes, specific functions and key features of common digital systems and tools and operates them effectively to complete routine tasks - Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency - Automatically implements standard procedures for routine decisions - Recognises and takes responsibility for addressing predictable problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP374 Operate a semi-automatic screen printing machine	ICPSP374C Operate a semi-automatic screen printing machine	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP374 Operate a semi-automatic screen printing machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- complete TWO different jobs on a semi- automatic machine according to relevant job, manufacturer, enterprise and health and safety requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the process for recording and reporting any substrate irregularities
- describe the process for checking ink compatibility and stencil compatibility
- discuss limitations when setting the substrate position and the precautions required when applying ink to the screen
- describe the products and materials that are used to keep the equipment clean
- describe health and safety concerns when producing a semi-automatic print
- outline the quality control devices that are used to check the print standards and variables or tolerances to note when checking the print against the proof
- describe the relationship between ink film thickness and ink density and acceptable maximum and minimum ink densities
- discuss the properties that determine belt speed and heat unit settings for curing
- identify the person responsible for final approval before commencing the production run
- outline the process for quality inspection during printing and the frequency of inspection
- discuss the importance of monitoring ink during the print run
- discuss the purpose of workplace documentation
- outline health and safety concerns in relationship to monitoring drying or curing systems
- describe the maintenance that should be carried out on this machine and the importance of reporting faulty equipment

- describe stacking, storing and handling processes and the importance of labelling and recording processes
- describe the health and safety practices that must be adhered to when reclaiming screens
- describe the importance of keeping equipment and surrounding areas clean, including the cleaning of screens and squeegees
- describe the correct procedures for disposing of liquid waste
- outline the processes for storing screens to minimise damage
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to cleaning chemicals and semi-automatic screen printing machines.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP375 Automatically produce complex screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce complex screen prints of two or more colours using automatic printing machines.

It applies to individuals working in the printing and graphic arts industry who may have to set up and operate power-driven or hand-operated screen printing machines. They may have to provide leadership and guidance to others and have some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Load substrate	1.1 Substrate is checked against job specifications with any irregularities reported and rectified where possible 1.2 Substrate position and stencil registration are adjusted according to job specifications
2 Apply ink to screen	2.1 Ink is applied to screen in quantity required for screen size 2.2 Equipment is kept clean and spills are minimised

ELEMENT	PERFORMANCE CRITERIA
	2.3 Colour is mixed and ink is checked against job specifications 2.4 Feeder is set and adjusted to suit substrate
3 Produce proof print	3.1 Proof print is run off and checked for colour, strength, registration, adhesion, clarity, gloss level, drying or curing, artwork detail and other technical aspects according to job specifications 3.2 Adjustments are made according to product and machine specifications 3.3 Appropriate approval to commence production is sought prior to commencement 3.4 Belt speed and energy required are set to achieve desired properties and printing speeds are adjusted to suit
4 Run job and monitor print quality	4.1 Printing speed production is adjusted to maximise quality and output 4.2 Print quality is continuously evaluated and adjusted as required 4.3 Effects of ink alterations during run are monitored and appropriate action taken according to manufacturer or supplier and job specifications 4.4 Workplace documentation is completed as required 4.5 Curing and drying are constantly monitored and adjusted according to manufacturer or supplier and job specifications
5 Carry out routine user maintenance	5.1 Equipment is lubricated, cleaned and adjusted according to manufacturer or supplier specifications 5.2 Faults are identified and reported according to enterprise procedures
6 Handle production output	6.1 Output is checked for thorough drying or curing before stacking 6.2 Job status and progress are checked against job specifications and any necessary action is taken
7 Shut down machine	7.1 Excess ink, screens, squeegees and flood coaters are removed and cleaned according to work health and safety (WHS) requirements and manufacturer or supplier specifications 7.2 Waste materials are disposed of according to manufacturer or supplier specifications, regulatory requirements and enterprise procedures 7.3 Equipment and surrounding areas are cleaned according to manufacturer or supplier specifications and enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.3, 3.1, 3.2, 4.3-4.5, 5.1, 6.2, 7.2, 7.3	- Establishes job requirements from relevant information - Identifies correct processes from procedural documentation
Writing	1.1, 3.3, 4.4, 5.2	Records information relating to outcomes of job requirements and machinery problems
Oral Communication	1.1, 3.3	Checks the progress and quality of the job with supervisor
Numeracy	2.1, 3.4, 4.1	Uses basic mathematical formula to calculate required resources and determine measurements and adjustments to equipment and settings
Navigate the world of work	5.2, 7.1-7.3	Complies with organisational, legal and regulatory requirements related to own work with specific reference to safety
Get the work done	1.1, 1.2, 2.2-2.4, 3.1, 3.2, 4.1-4.3, 4.5, 5.1, 5.2, 6.1, 6.2	- Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency - Automatically implements standard procedures for routine decisions - Recognises and takes responsibility for addressing predictable problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP375 Automatically produce complex screen prints	ICPSP375C Automatically produce complex screen prints	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP375 Automatically produce complex screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce TWO different complex prints of more than two colours, containing line and tone, using an automatic machine according to job, manufacturer, enterprise and health and safety requirements
- demonstrate use of computerised control, monitoring and data entry systems if available and appropriate.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain any machine adjustments required prior to setting up
- describe machine and feeder maintenance required prior to printing
- describe machine and feeder adjustments required to allow for characteristics of the substrate, including the need to prepare substrate when loading the feeder
- outline the procedure to confirm the screen sequence of colour, ink, substrate and squeegee or flood coater prior to printing
- describe the system for setting the feed board and loading substrate and the adjustment of the stock feed system
- describe the method for ensuring the substrate is fed into the machine at the required production speed without damage, distortion or variation in position
- outline the criteria for selecting the right substrate for the job and the ink and substrate compatibility
- describe the characteristics of solvents and ink additives and compatibility to this ink system

- explain the process for the correct positioning, registering and screen locking, and outline correct positioning of the squeegee or flood coater
- describe factors that contribute to the adjustment requirements of the frame
- explain the shore hardness of the squeegee blade and the process of selection
- explain the relationship between ink deposit, squeegee speed and belt speed and temperature of the drying or curing unit
- explain the health and safety requirements when working with infra-red or UV curing units
- summarise routine maintenance to be undertaken on this drying or curing unit
- outline the ink drying or ink curing characteristics of different substrates
- explain the health and safety concerns when using an automatic machine
- describe the assessment of colour to ensure it conforms to job specifications and other important checks to be completed on the initial proof run before continuing
- describe the ongoing evaluation of print quality and substrate feeding during the run
- identify ideal printing speeds for different substrates
- describe the effect of humidity on the substrate
- outline the ongoing maintenance of the correct viscosity of ink during the run and methods to determine if print is dried or cured before handling
- describe the handling of the output to prevent offsetting of ink, blocking, sweating or rewetting of ink
- describe the effect that weather conditions could have on output capacity
- explain the importance of determining the exact output count and recording production details on the job sheet
- describe the health hazards associated with ink or solvents
- outline the correct procedure for removing the ink without damaging the screen
- outline the correct method of cleaning squeegees or flood coaters, machine and surrounding area and the maintenance that is required on the machine after printing is completed
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to cleaning chemicals and automatic printing machines.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP376 Operate an automatic screen printing machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce a print on a range of common substrates, using automatic equipment and screening techniques.

It applies to individuals working in the printing and graphic arts industry who may have to set up and operate power-driven or hand-operated screen printing machines. They may have to provide leadership and guidance to others and have some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Identify job requirements	1.1 Substrate is checked against job specifications with any irregularities reported and rectified where possible 1.2 Ink is checked against job specifications 1.3 Artwork is checked against job specifications
2 Prepare machine to print	2.1 Correct film and emulsion exposure is set and correctly completed according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	2.2 Substrate position and screen alignment are set according to job specifications 2.3 Ink is applied to screen in quantity required for screen size 2.4 Equipment is kept clean and spills are minimised
3 Produce proof print	3.1 Proof print is run off and checked for colour, strength, registration, adhesion, clarity, gloss level, drying or curing, artwork detail and other technical aspects according to job specifications 3.2 Adjustments are made according to product and machine specifications 3.3 Belt speed and temperature required are set to achieve desired curing or drying properties 3.4 Appropriate approval to commence production is sought prior to commencement
4 Run job and monitor print quality	4.1 Printing speed production is adjusted to maximise quality and output 4.2 Print quality is continuously evaluated and adjusted as required 4.3 Effects of ink alterations during run are monitored and appropriate action taken according to manufacturer or supplier and job specifications 4.4 Workplace documentation is completed as required 4.5 Curing and drying are constantly monitored and adjusted according to manufacturer or supplier and job specifications
5 Carry out routine user maintenance	5.1 Equipment is cleaned according to enterprise procedures 5.2 Lights are replaced as necessary and alerts or alarms are tested 5.3 Faults are identified and reported according to enterprise procedures
6 Stack production output	6.1 Output is checked for thorough drying or curing before stacking 6.2 Job is labelled and recorded according to enterprise procedures 6.3 Job status and progress are checked against job specifications and any necessary action is taken
7 Conduct shutdown of the production process	7.1 Material is transferred to correct destination in safe manner 7.2 Excess ink, screens, squeegees and flood coaters are removed and cleaned according to work health and safety (WHS) requirements and manufacturer or supplier specifications 7.3 Waste materials are disposed of according to manufacturer or

ELEMENT	PERFORMANCE CRITERIA
	supplier specifications, regulatory requirements and enterprise procedures 7.4 Equipment and surrounding areas are cleaned according to manufacturer or supplier specifications and enterprise procedures 7.5 Tools and equipment are stored and maintained according to manufacturer specifications to ensure ease of access and operator safety 7.6 Correct procedure for dealing with spilt chemicals is demonstrated according to WHS requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1, 2.2, 3.1, 3.2, 4.3, 4.5, 6.3, 7.2, 7.4, 7.5	- Establishes job requirements from relevant information - Identifies correct processes from procedural documentation
Writing	1.1, 3.4, 4.4, 5.3, 6.2	Records information relating to outcomes of job requirements and machinery problems
Oral Communication	1.1, 3.4	Checks the progress and quality of the job with supervisor
Numeracy	2.1, 2.3, 3.2, 3.3, 4.1, 4.5	Uses simple mathematical calculations to determine job requirements and equipment settings
Navigate the world of work	4.5, 5.1, 5.3, 6.2, 7.1-7.6	- Appreciates the implications of legal and regulatory responsibilities related to own work with specific reference to safety - Considers own role in terms of its contribution to broader goals of the work environment
Get the work done	1.1-1.3, 2.1, 2.2, 2.4, 3.1, 3.2, 4.2, 4.3, 4.5, 5.1, 5.2, 6.1, 6.3	- Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency - Automatically implements standard procedures for

		- routine decisions - Recognises and takes responsibility for addressing predictable problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP376 Operate an automatic screen printing machine	ICPSP376C Operate an automatic screen printing machine	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP376 Operate an automatic screen printing machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- complete TWO different jobs on an automatic printing machine according to manufacturer, job, enterprise and health and safety requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the process of recording and reporting any substrate irregularities
- describe the checks used for ink compatibility and stencil compatibility
- describe the process of setting the substrate position
- name the products and materials used to keep the equipment clean
- discuss health and safety concerns when applying ink to the screen and producing an automated print run
- describe the quality control devices that are used to check the print standards and acceptable variables or tolerances when checking the print against the proof
- describe the relationship between ink film thickness and ink density, and the maximum and minimum densities allowed
- outline the properties that determine belt speed and heat unit setting for curing
- name the person responsible for the final approval before commencing the production run
- describe required quality inspection during the printing process and discuss the frequency of these inspections
- outline the purpose of workplace documentation
- discuss health and safety concerns in relation to monitoring drying or curing systems
- outline the maintenance that should be carried out on the machine and the importance of reporting faulty equipment

- describe stacking, storing and handling processes and the importance of labelling and recording processes
- outline necessary health and safety practices when reclaiming screens
- describe the importance of keeping equipment and surrounding areas clean, including the cleaning of screens and squeegees
- describe the correct procedures for disposing of liquid waste
- outline the process for storing screens to minimise damage
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to cleaning chemicals and automatic screen printing machines.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP382 Produce computer image for screen printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to generate electronic art to a supplied layout film positive or computer cut stencil.

It applies to individuals working in the printing and graphic arts industry who may have to set up and operate power-driven or hand-operated screen printing machines. They may have to provide leadership and guidance to others and have some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare for scanning	1.1 Original is scaled to conform to job specifications 1.2 Original is assessed to determine scanner settings 1.3 Original is cleaned and correctly mounted according to job specifications 1.4 Correct settings are selected for original to be scanned
2 Scan and check image	2.1 Original is scanned according to quality requirements

ELEMENT	PERFORMANCE CRITERIA
	2.2 Quality of scanned image is checked against job specifications 2.3 Appropriate software is applied for any processing of text if necessary
3 Prepare combining strategy	3.1 Required data from electronic files is accessed 3.2 Appropriate application is opened to undertake combining tasks 3.3 Required fonts are accessed according to job specifications
4 Combine data	4.1 Page layout size is created according to job specifications 4.2 Elements are placed in page according to job specifications 4.3 Trapping (spread and chokes) is applied according to job specifications 4.4 Step and repeat function is accessed according to job specifications 4.5 Elements are stepped according to job specifications 4.6 Output menu is configured according to job specifications
5 Access and maintain output device	5.1 Output devices are set up and maintained according to manufacturer or supplier specifications and enterprise procedures 5.2 Suitable material is identified and loaded into output device
6 Produce image	6.1 System is activated to initiate output according to job specifications 6.2 Quality is monitored according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 2.2, 2.3, 3.3, 4.1-4.6, 5.1	Evaluates and establishes job requirements and correct processes from relevant information and instructions
Numeracy	1.1	Uses basic mathematical formula to calculate scaling measurements according to job requirements
Navigate the world of	5.1, 6.2	Monitors adherence to organisational and enterprise policies and procedures and considers own role in terms

work		of its contribution to the broader goals of the work environment
Get the work done	1.2-1.4, 2.1, 2.3, 3.1-3.3, 4.2-4.6, 5.2, 6.1	• Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks • Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency • Automatically implements standard procedures for routine decisions • Recognises and takes responsibility for addressing predictable problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP382 Produce computer image for screen printing	ICPSP382C Produce computer image for screen printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP382 Produce computer image for screen printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly produce TWO separate images on film or stencil according to manufacturer, job, enterprise and work health and safety (WHS) requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe the tolerance that is allowed when scaling the original
- name the common scanner dots per inch for graphic line images
- describe the use of original angling and the resolutions that are used in scanning
- name the format that the scan is saved in
- describe how to retain the format when optical character recognition scanning and how to access external files
- name the most appropriate software for this task
- outline the checks required to maintain quality standards
- outline the procedure used if required files are not readily accessible
- describe the type of elements that can be used, the application of trapping and the amount of step and repeats in a job
- list the types of output devices used in screen printing and describe the first step in configuring the output menu for the device used
- discuss the importance of saving the file prior to sending it to the output device.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to:

- a computer and scanner and appropriate software original images
- workplace documents.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSCP383 Prepare film for complex screen printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare film for complex screen printing using appropriate equipment and Raster Image Processor (RIP) software.

It applies to individuals working in the printing and graphic arts industry who may have to set up and operate power-driven or hand-operated screen printing machines. They may have to provide leadership and guidance to others and have some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Identify job requirements	1.1 Image specifications are checked according to job requirements and enterprise procedures 1.2 Orientation is checked against job specifications and adjusted if required 1.3 Resolution or dots per inch (DPI) is determined for template creation

ELEMENT	PERFORMANCE CRITERIA
2 Prepare and operate equipment	2.1 Scanner and computer is selected, turned on and scanner glass cleaned 2.2 Scanner software is selected and opened and correct settings made according to job requirements 2.3 Previews are made, image is selected, finished scan completed and image adjusted as required 2.4 Image format is determined and saved to storage device
3 Select imaging software	3.1 Software is selected, scan is opened and separations are produced on individual layers according to job specifications 3.2 Colours are excluded as required on separation layers 3.3 Stroke is applied for bleed according to printing equipment 3.4 Separation layers are coloured for RIP software 3.5 Image format is determined according to RIP software requirements 3.6 Supplied finished artwork or separation is checked for output capability
4 Select and operate appropriate equipment	4.1 Image setter or dye printer is selected, turned on and checked, and heads cleaned prior to outputting images 4.2 RIP software is selected and opened, and software settings checked and set according to output specifications 4.3 Nesting is checked to ensure no film is wasted 4.4 Image output is evaluated against job specifications and measuring, including checking with reflection densitometer valve 4.5 Film is handled according to manufacturer specifications 4.6 Output device is closed down according to manufacturer recommendations
5 Assess job specifications	5.1 Requirements of printing process and job specification are assessed 5.2 Quality of job elements, including resolution or DPI, is specified according to client requirements 5.3 Films, dye cartridges, their qualities and process requirements are determined 5.4 Stock levels are checked and maintained according to job specifications 5.5 Copy is checked and assessed according to job specifications

ELEMENT	PERFORMANCE CRITERIA
6 Prepare and operate equipment	6.1 Scanner and computer is selected and artwork or copy is placed squarely in scanner 6.2 Scanner software is selected and opened and correct settings are made according to job requirements 6.3 Previews are made, images selected, finished scan completed and image adjusted as required 6.4 Image format is determined and saved to storage device
7 Select and use appropriate imaging software	7.1 Software is selected, scan is opened using layers and software tools as required, and separations are provided on individual layers according to job specifications 7.2 Colours are excluded as required on separation layers 7.3 Separate layers are coloured for specific RIP software requirements 7.4 Image, layers or separations are manually nested, if required, in accordance with film output device size 7.5 Image format is determined according to RIP software requirements and saved to storage device 7.6 Supplied finished artwork or separations are checked for output suitability

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.2, 3.1, 4.2, 4.4-4.6, 5.1, 5.2, 5.4, 5.5	- Evaluates and establishes job requirements from relevant information - Identifies correct process from manufacturer or supplier instructions
Numeracy	1.3, 7.4	Uses basic mathematical formula to calculate measurements and adjustments to equipment and settings
Navigate the world of work	1.1	Monitors adherence to organisational policies and procedures

Get the work done	1.2, 1.3, 2.1-2.4, 3.1-3.6, 4.1-4.4, 5.1, 5.3, 5.4, 6.1-6.4, 7.1-7.6	- Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency - Automatically implements standard procedures for routine decisions - Recognises and takes responsibility for addressing predictable problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP383 Prepare film for complex screen printing	ICPSP383A Prepare film for complex screen printing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP383 Prepare film for complex screen printing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare film for TWO different jobs involving a variety of image effects, according to manufacturer, job and enterprise requirements
- correctly operate appropriate equipment and software, including Raster Image Processor (RIP) software, to meet TWO job specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify image specifications, orientation and the resolutions or dots per inch (DPI) determination
- explain the scanner settings, including adjusting the brightness or contrast of the image
- discuss the exclusion of colours and bleed for a particular job and the purpose of colouring separation layers
- outline the process for selecting ink and colour identification
- explain the common file format when using RIP software and the settings that must be checked prior to ripping
- explain the correct procedures for handling film
- outline the nesting requirements of particular jobs and the output suitability prior to producing separations
- outline the correct output device and the regular checks and maintenance that must be performed on an image setter or dye printer\
- outline the procedures used for evaluating the output film to ensure it conforms to job specifications.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to:

- a computer and scanner and RIP software
- workplace documentation
- job specifications
- enterprise procedures.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP120 Pack product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely and correctly pack basic printed or paper product without damage.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Assess final product	1.1 Finished job is collected/received and checked against job specifications according to enterprise procedures 1.2 Defects, irregularities and discrepancies are identified and action taken according to enterprise procedures 1.3 Fanning, knock up and splitting of product is performed safely and efficiently to ensure ease of use in next stage
2. Pack product	2.1 Wrapping and packaging materials are prepared according to

ELEMENT	PERFORMANCE CRITERIA
	enterprise procedures 2.2 Product is packaged to specification 2.3 Packaged goods are checked, weighed and labelled according to delivery instructions and enterprise procedures
3. Prepare stock for next phase	3.1 Product is stacked onto pallets in a predetermined pattern that will stop the product falling or being damaged 3.2 If required, the pallet is wrapped and moved safely to another location in predetermined form as appropriate to product size and type 3.3 Documentation associated with tasks is accurately completed according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.3, 3.3	Recognises text within job specifications and follows written instructions
Writing	2.3, 3.3	Completes relevant documentation associated with tasks
Numeracy	2.3	Uses simple mathematical techniques to calculate weight and size of packaged goods
Navigate the world of work	1.1-1.3, 2.1, 2.3, 3.3	Recognises and follows organisational and legislative requirements associated with own role
Get the work done	1.1-1.3, 2.2, 2.3, 3.1, 3.2	- Follows pre-determined, sequenced plans for tasks with more than one step - Follows clear, step-by-step instructions or procedures to address a small set of identified, routine problems directly relevant to own role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP120 Pack product	ICPSU120C Pack product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP120 Pack product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare and pack TWO lots of printed or other paper product following correct procedures, and job and workplace specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline how to safely operate wrapping equipment and/or use wrapping and packing materials
- explain how to decide on appropriate methods and types of packaging
- explain how the type of transport or destination have a bearing on the wrapping and packing method
- explain methods used to determine number of units to be wrapped in each parcel
- explain the documents that must accompany packed product and the records that are needed.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to resources and product to pack.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP201 Prepare, load and unload reels and cores on and off machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to load and unload reels and cores on and off machines.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, and use limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare reels and cores	1.1 Faulty material is visually identified and removed according to enterprise procedures 1.2 Substrate is positioned in correct unwind direction 1.3 Substrate is spliced/joined according to job requirements 1.4 Reel cores are selected or prepared to meet work health and safety (WHS) requirements and job specifications

ELEMENT	PERFORMANCE CRITERIA
2. Load reels and cores onto machine	2.1 Reels are loaded according to WHS requirements and manufacturer's and enterprise procedures and specifications 2.2 Reel cores are loaded to meet job specifications 2.3 Area around machine is cleaned during and on completion of loading
3. Unload reels off machine	3.1 Reels are unloaded according to WHS requirements and manufacturer's and enterprise procedures and specifications 3.2 Reels are prepared (stripped, stacked, wrapped, labelled) for next process according to manufacturer's and enterprise procedures and specifications 3.3 Reels are stored according to manufacturer's and enterprise procedures and specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.4, 2.1, 2.2, 3.1-3.3	Recognises text within job specifications and follows written instructions
Navigate the world of work	1.4, 2.1, 3.1-3.3	Recognises and follows organisational and legislative requirements associated with own role
Get the work done	1.1-1.4, 2.1-2.3, 3.1-3.3	- Follows pre-determined, sequenced plans for tasks with more than one step - Follows clear, step-by-step instructions or procedures to address a small set of identified, routine problems directly relevant to own role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP201 Prepare, load and unload reels and cores on and off machine	ICPSU201C Prepare, load and unload reels and cores on and off machine	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP201 Prepare, load and unload reels and cores on and off machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify all stop and safety controls on the machine
- correctly load and unload reels and cores on and off machines while maintaining health and safety standards
- prepare, load and unload at least TWO wide or narrow reels and cores, demonstrating both manual and either semi-automatic or automatic splicing, according to job specifications (both tapes and adhesive splicing mechanisms must be demonstrated).

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify health and safety factors relating to manual handling of reels as well as eliminating potential dangers by ensuring correct placement of all nip points, guards and safety devices on relevant machines
- describe location of machine manuals, safety and other documentation relevant to this task and outline information included in them
- explain techniques that could be used to:
 - combat distorted reels and cores
 - join reels to the web
 - identify reel grain direction
 - manually handle reels
 - prepare and load selected reels
 - unload reels off the machine for further processing
 - identify faulty reels and cores

- summarise how to determine:
 - information that can be obtained from the reel label
 - characteristics of reels
 - features that indicate a reel is faulty
 - position of reels on the unwind unit
 - faults created by reels being unloaded incorrectly
 - preparations to consider for the next operation.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to a printing or converting machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP202 Prepare, load and unload product on and off machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare, load and unload product on and off machines according to work health and safety (WHS) requirements and manufacturer/supplier's specifications with minimum downtime.

This unit applies to individuals who provide production, corrugating and mail house support across various sectors of the printing and graphic arts industry. They use limited practical skills and fundamental knowledge in a defined context, and generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare product	1.1 Job sheets or equivalent are interpreted correctly 1.2 Product is located and prepared to meet job specifications 1.3 Product is positioned correctly on the machine to meet job specifications 1.4 Faulty product is visually identified and removed according to WHS requirements and enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
2. Load product onto machine	2.1 Product is loaded according to WHS requirements and manufacturer's and enterprise procedures and specifications 2.2 Area around machine is cleaned during and on completion of loading
3. Unload product off machine	3.1 Product is unloaded according to WHS requirements and manufacturer's and enterprise procedures and specifications 3.2 Product is prepared (hand-stripped, stacked, wrapped, labelled) for next process according to manufacturer's and enterprise procedures and specifications 3.3 Product is stored according to manufacturer's and enterprise procedures and specifications

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.4, 2.1, 3.1-3.3,	Recognises text within job specifications and follows written instructions
Writing	1.1, 3.2	Records key information related to outcomes of the job
Numeracy	1.1, 1.2, 3.2	Uses simple mathematical calculations and arranges sequential numerical information
Navigate the world of work	1.4, 2.1, 3.1-3.3	Recognises and follows organisational and legislative requirements associated with own role
Get the work done	1.2-1.4, 2.2, 3.2, 3.3	- Follows pre-determined, sequenced plans for tasks with more than one step - Follows clear, step-by-step instructions or procedures to address a small set of identified, routine problems directly relevant to own role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP202 Prepare, load and unload product on and off machine	ICPSU202C Prepare, load and unload product on and off machine	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP202 Prepare, load and unload product on and off machine

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly prepare, load and unload product on and off machines according to health and safety requirements and manufacturer's/supplier's specifications with minimum downtime
- prepare, load and unload product on and off any ONE appropriate machine incorporating specific enterprise requirements; manual techniques; fanning, turning, jogging (where appropriate) and stacking; to job and workplace specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline information that can be obtained from the package label
- describe benefits of fanning sheets prior to stacking or loading
- identify elements of a correctly knocked up stack
- describe conditions that cause a stack to become uneven
- list techniques to combat distorted stacks
- outline techniques to ensure the stack is knocked up correctly
- identify health and safety concerns relating to manual handling of substrates as well as unloading sheets off the machine
- explain how watermarks are identified in substrates and how to position them correctly
- describe different characteristics of coated and uncoated stocks
- outline faults created by substrates being unloaded incorrectly
- identify the grain direction of a substrate
- explain how to prepare and load selected substrates
- demonstrate knowledge of correct manual handling of the substrate
- explain how to unload sheets off the machine

- describe procedures for turning substrates
- locate machine manuals, safety and other documentation relevant to this task, and outline the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to a printing or converting machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP203 Prepare and maintain the work area

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake basic housekeeping functions, handle chemicals and liquid waste in the workplace, and prepare and maintain the work area according to work health and safety (WHS) and enterprise procedures.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Perform general cleaning duties	1.1 Requirements for cleaning duties are identified 1.2 Personal safety equipment, where needed, is selected and used according to WHS and enterprise procedures 1.3 Appropriate cleaning equipment and chemicals/detergents for specific tasks are determined, prepared and mixed to manufacturer's specifications and WHS procedures 1.4 Procedures for handling, storage and correct disposal of

ELEMENT	PERFORMANCE CRITERIA
	cleaning liquids are carried out according to enterprise, WHS and EPA specifications 1.5 Cleaning is carried out to WHS and enterprise requirements
2. Maintain supplies of materials	2.1 Requests are received, where relevant, and tasks are confirmed and organised according to specific procedures 2.2 Tools and equipment are identified, stored and maintained according to manufacturer's recommendations to ensure ease of access and operator safety 2.3 Appropriate equipment for transferring material or equipment is identified and organised, where relevant 2.4 Material or equipment is loaded and unloaded using suitable equipment (other than forklift) according to materials handling requirements, safe work practices and correct manual handling techniques 2.5 Material is transferred to correct destination in a safe manner
3. Store and retrieve artwork, information, used plates and film	3.1 Inventory control procedures are followed to ensure correct filing and retrieval of artwork, information, used plates and film 3.2 Artwork and other materials are stored and retrieved according to enterprise procedures to ensure preservation
4. Handle chemicals and liquid waste	4.1 Material safety data sheets are used to identify safe chemical handling procedures 4.2 Chemicals and liquid waste are handled according to manufacturer's specifications and enterprise WHS requirements 4.3 Correct procedure for dealing with spilt chemicals is demonstrated according to WHS requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.3, 1.5, 2.1, 2.2, 3.2, 4.1, 4.2	Recognises and interprets textual information from a range of sources to determine job requirements

Numeracy	1.3	Uses simple mathematical techniques to calculate weights of materials
Navigate the world of work	1.2-1.5, 2.4, 2.5, 4.2, 4.3	Recognises and follows organisational and legislative requirements associated with own role
Interact with others	2.1	Identifies main information from oral and written communication and generally responds appropriately
Get the work done	1.1-1.3, 2.2-2.4, 3.1	- Follows pre-determined, sequenced plans for tasks with more than one step - Follows clear, step-by-step instructions or procedures to address a small set of identified, routine problems directly relevant to own role - Takes responsibility for routine low-impact decisions within familiar situations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP203 Prepare and maintain the work area	ICPSU203C Prepare and maintain the work area	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP203 Prepare and maintain the work area

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly perform general cleaning duties
- maintain supplies of materials, information, used plates and film, and store and retrieve artwork
- handle chemicals and liquid waste.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify health and safety factors that must be considered when:
 - using cleaning chemicals and other relevant materials and substrates used in the workplace
 - dealing with personal safety equipment required to perform cleaning duties
 - operating machinery – such as safely switching off machinery before cleaning
 - safely transporting finished products
 - disposing of liquid waste as well as storing and disposing chemicals
 - lifting – must use the correct techniques and demonstrate an understanding of weight limitations, and how to place loads to avoid back injury
- explain how to correctly handle supplies and parts, as well as record necessary details in the transfer of finished product
- outline how to operate inventory control systems and follow filing inventory procedures utilised in the work environment
- describe key information on accurate storage and retrieval of materials
- explain the nature of various materials and substrates

- outline environmental considerations associated with storage of artwork, photographic materials and plates
- describe potential dangers of handling supplies or parts
- summarise potential accidents possible when cleaning or handling supplies.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to a production environment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP207 Prepare machine for operation (basic)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare printing and finishing machines, and assist with their operation according to enterprise procedures.

It applies to individuals who undertake machine-minding duties in a production environment, as well as off-siders assisting in the operation of a machine.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare or set up substrates (or loads)	1.1 Job sheets or equivalent instructions are interpreted correctly 1.2 Product is located, checked and prepared to meet job specifications according to enterprise procedures and work health and safety (WHS) procedures 1.3 Faulty material is visually identified and removed according to established enterprise procedures and WHS procedures
2. Set up delivery systems	2.1 Delivery systems are set up and adjusted according to job requirements

ELEMENT	PERFORMANCE CRITERIA
	2.2 Readiness of transport and delivery systems is reported according to enterprise standards for final adjustments by designated person
3. Prepare machine	3.1 Machine is set up according to job instructions 3.2 Inks, glues, liquid and/or other materials are loaded as required according to manufacturer's instructions and enterprise procedures 3.3 Plates, cutting or other devices are installed as required according to manufacturer's instructions and enterprise procedures 3.4 Registration, alignment or centring is confirmed according to machine manufacturer's/supplier's instructions and enterprise procedures 3.5 Machine is run through cycle at the same time ensuring the substrate/product is positioned properly and the process is being performed according to established workplace and WHS procedures 3.6 Readiness of machine is reported according to enterprise procedures for final adjustments and proofing by designated person
4. Conduct shutdown of production process	4.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 4.2 Unused materials are stored according to manufacturer's/supplier's specifications and enterprise procedures 4.3 Used plates, cutting and other devices are removed and stored according to manufacturer's/supplier's specifications and enterprise procedures 4.4 All product is removed from operating area according to enterprise procedures and WHS standards 4.5 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 4.6 Repair/adjustment is verified prior to resumption of operations
5. Clean and wash up machine at end of run	5.1 Machine sections, as relevant to process, are cleaned ready for next run 5.2 Inking/gluing/coating system, if used in process, is washed ready for next run, and waste is disposed of according to enterprise and regulatory requirements 5.3 In-line printing/converting/binding/finishing/coating units are cleaned ready for next run 5.4 Feed, transportation and delivery systems are disengaged and

ELEMENT	PERFORMANCE CRITERIA
	cleaned ready for next run

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 3.1-3.4, 3.6, 4.1, 4.2, 4.3	Recognises text within job specifications and follows written instructions
Writing	2.2, 3.6, 4.5	Identifies and reports work progress and faults according to enterprise formats
Numeracy	3.5	Uses simple mathematical calculations and arranges sequential numerical information
Navigate the world of work	1.2, 1.3, 2.2, 3.2-3.6, 4.1-4.6, 5.2	Recognises and follows organisational and legislative requirements associated with own role
Interact with others	4.1	Seeks to cooperate with others to achieve results in immediate work context
Get the work done	1.2, 1.3, 2.1, 3.1-3.5, 4.5, 5.1, 5.3, 5.4	- Follows pre-determined sequenced plans for tasks with more than one step - Follows clear, step-by-step instructions to address a routine problems directly relevant to own role - Takes responsibility for routine low-impact decisions within familiar situations - Understands purpose and some specific functions of some common digital tools used in work contexts

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include	reel

EITHER:	OR
	• sheet
Setting up and adjusting MUST include EITHER:	• unwind and rewind reels • webbing procedures and web control systems • splicing/joining reels • folder and sheeter OR • feeder • sheet/production pick-up and transportation system • transfer system • delivery systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP207 Prepare machine for operation (basic)	ICPSU207C Prepare machine for operation (basic)	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP207 Prepare machine for operation (basic)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate all safety devices on the machine
- prepare machines and assist with their operation according to enterprise procedures
- prepare and set up to final adjustment stage, any ONE machine according to manufacturer's specifications, or set up a minor process on a dedicated machine.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain how to avoid back strain when lifting heavy objects
- summarise best-practice handling of supplies, parts and finished product
- outline how to avoid damaging finished product
- identify supplies that require special handling
- list health and safety considerations when preparing substrates and setting up a machine
- outline health and safety procedures for operating machinery, such as safely switching off machinery before cleaning
- summarise procedures for disposal of faulty materials
- identify possible danger areas of the machine
- describe location and function of registration section of the machine
- describe problems that can interrupt the running cycle of the machine
- list areas of the machine that are modified during shutdown
- identify areas of the machine to check for possible repair
- describe details to include when labelling unused ink
- identify health and safety considerations for washing a machine

- explain how ineffective wash-up can affect the next production run

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to a printing or converting machine in a production environment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP208 Operate and monitor machines (basic)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to operate and monitor machines under supervision according to enterprise requirements.

It applies to individuals working as machine-minders and off-siders assisting in the operation of a machine. This unit is an integral part of most printing and converting, and binding and finishing produce units.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Operate and monitor delivery systems	1.1 Job sheets or equivalent instructions are interpreted correctly 1.2 Delivery systems are monitored and adjusted to ensure efficient and continuous operation and avoid damage to finished product 1.3 Substrate is added to and removed from process according to job instructions 1.4 Need for major adjustment to process is identified and reported

ELEMENT	PERFORMANCE CRITERIA
	to designated person according to enterprise operating procedures
2. Maintain and monitor production process	2.1 Production process is operated and monitored in association with fellow workers and according to enterprise specifications and planned daily schedule 2.2 Product is monitored and minor adjustments are made to ensure quality of output is maintained 2.3 Need for major adjustments to process is identified and reported to appropriate person according to operating procedure 2.4 Faulty performance of equipment is identified and reported according to enterprise procedures within defined work area 2.5 Waste is sorted according to enterprise procedures
3. Conduct shutdown of production process	3.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 3.2 Shutdown is conducted in association with fellow workers and in compliance with work health and safety (WHS) requirements 3.3 Unused materials are stored according to manufacturer's/supplier's specifications and enterprise operating procedures 3.4 Used plates, cutting and other devices are removed and stored according to manufacturer's/supplier's specifications and enterprise operating procedures 3.5 All product is removed from operating area according to enterprise procedures and WHS standards 3.6 Machine faults requiring repair are identified and reported to designated person, according to enterprise procedures 3.7 Repair/adjustment is verified prior to resumption of operations
4. Clean and wash up machine at end of run	4.1 Machine units, as relevant to process, are cleaned ready for next run 4.2 Inking/gluing/coating system, if used in process, is washed ready for next run, and waste is disposed of according to enterprise and regulatory requirements 4.3 In-line printing/converting/binding/finishing/coating units are cleaned ready for next run 4.4 Feed, transportation and delivery systems are disengaged and cleaned ready for next run

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 3.1, 3.3, 3.4, 3.5, 3.6	Reviews and interprets job sheet instructions correctly
Writing	1.4, 2.3, 2.4, 3.2, 3.6	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	2.1, 3.2	Identifies and reports adjustments and faults to co-workers
Numeracy	2.2, 3.7	Uses basic mathematical formulae to determine required consumables, adjust equipment and machinery, and estimate time required to complete job
Navigate the world of work	2.4, 2.5, 3.1, 3.2, 3.5, 3.6, 4.2	- Takes some personal responsibility for adherence to organisational policies and procedures - Considers own role for its contribution to broader goals of work team
Interact with others	2.1, 3.2	Cooperates with others as part of familiar, routine activities and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1-1.4, 2.1-2.4, 3.3, 3.4, 3.6, 3.7, 4.1-4.4	- With assistance, determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources - Understands purpose and some specific functions of some common digital tools used in work contexts - Takes responsibility for routine low-impact decisions within familiar situations - Begins to identify and implement standard solutions for an increasing range of routine problems

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Delivery systems MUST include EITHER:	• reel OR • sheet
Monitoring and adjusting MUST include EITHER:	• reel stand and rewind section • web control system • sheeting section OR • feeder • sheet or product pick-up and transportation system • transfer system • delivery system

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP208 Operate and monitor machines (basic)	ICPSU208C Operate and monitor machines (basic)	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP208 Operate and monitor machines (basic)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly operate and monitor machines according to job and enterprise requirements
- demonstrate knowledge of all safety devices on the machine
- operate, monitor, shut down and clean any ONE machine according to manufacturer's specifications under the supervision of, or in conjunction with, a worker with the appropriate skills.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- handling of supplies, parts and finished product
- explain how to avoid back strain when lifting heavy objects
- explain how to avoid damaging finished product
- identify supplies that require special handling

For reel systems only

- identify area of the web control system to adjust to maintain correct web tension

For sheet systems only

- outline areas of the transport and delivery systems to monitor to ensure trouble-free operation
- describe what to check when removing a substrate from the machine

Maintaining production processes

- outline the basic criteria for assessing finished product
- list adjustments to the machine to correct TWO different production or quality problems

Shutdown procedures

- list areas of the machine that are modified during shutdown
- identify areas of the machine to check for possible repair
- describe details to include when labelling unused ink

Cleaning and washing machine

- explain how an ineffective wash-up can effect the following production run

Health and safety

- identify health and safety factors that must be considered when:
 - setting and/or operating machine transport and delivery systems
 - operating and monitoring the production process
 - washing a machine
 - safely switching off machinery before cleaning.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to a printing or converting machine in a production environment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP211 Prepare ink and additives

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare inks and additives in a range of printing processes.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Select ink	1.1 Inks, dyes and additives are selected according to job specifications 1.2 Suitability of inks, dyes or additives are checked and appropriate action is taken to meet quality standards of client requirements, and enterprise and industry standards 1.3 Inks and dyes are selected according to suitability of substrate, adhesion, physical and chemical resistance, and light fastness, drying method and print process

ELEMENT	PERFORMANCE CRITERIA
2. Prepare ink	2.1 Inks, dyes and additives are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 2.2 Correct colour and weight/volume of ink are mixed and prepared to match requirements of the job specifications and the printing press to be used 2.3 Formulation of ink and approved colour is appropriately recorded
3. Store and handle ink	3.1 Inks, dyes and additives are appropriately stored, handled and labelled according to manufacturer's/supplier's instructions to prevent damage and hazards to personnel

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.2, 2.3, 3.1	Recognises text within job specifications and follows written instructions
Writing	2.3, 3.1	Records key information related to outcomes of the job
Numeracy	2.2	Uses simple mathematical techniques to determine weights and volume required
Navigate the world of work	1.2, 2.1, 3.1	Takes some personal responsibility for adherence to legal and regulatory requirements within industry standards and enterprise procedural frameworks
Get the work done	1.1-1.3, 2.2, 3.1	- With assistance, determines priorities and sequences steps involved in clearly defined, familiar tasks, and identifies and assembles required resources - Takes responsibility for routine low-impact decisions within familiar situations - Recognises and responds to predictable routine problems related to role in immediate work context

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP211 Prepare ink and additives	ICPSU211C Prepare ink and additives	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP211 Prepare ink and additives

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly prepare ink and additives as required by job specifications
- prepare at least TWO lots of inks or additives to match a colour sample and specific end-use requirements according to workplace specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify health and safety concerns related to preparation and matching of inks and additives
- describe how inks and additives are correctly selected to match process and job requirements
- explain how to determine suitability of ink for the particular process
- describe characteristics of the chosen ink matched to the substrate
- explain how to determine if ink adheres to the substrate
- describe how to determine physical, chemical and light or colour fastness of ink
- explain how correct handling procedures are determined
- describe how to determine correct weight/volume required
- outline methods to check and adjust ink colour and consistency
- explain how to ensure quality of ink or additive is the required standard
- describe the effect lighting conditions have on colour matching
- outline how to determine compatibility of the ink being mixed
- explain how to check inks for correct colour
- list Material safety Data sheets (MSDS) for this ink system that are at hand

- describe environmental conditions relevant to the storage of inks and additives
- outline conventions for labelling mixed inks
- describe how to dispose of inks, solvent and solvent rags
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to inks and additives.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP212 Prepare coatings and adhesives

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare coatings and adhesives.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Select coatings, adhesives and additives	1.1 Coatings, adhesives and additives are selected according to job specifications 1.2 Suitability of coatings, adhesives and additives are checked and appropriate action is taken to meet quality standards of client requirements, and enterprise and industry standards 1.3 Coatings, adhesives and additives are selected according to suitability of substrate, physical and chemical properties and performance

ELEMENT	PERFORMANCE CRITERIA
2. Prepare coatings, adhesives and additives	2.1 Coatings, adhesives and additives are prepared according to Work Health and Safety (WHS) requirements and manufacturer's/supplier's instructions with suitable precautions to minimise waste 2.2 Correct weight/volume of coatings, adhesives and additives are mixed and prepared to match job specification and the process to be used 2.3 Formulation of coatings, adhesives and additives is appropriately recorded
3. Store and handle coatings, adhesives and additives	3.1 Coatings, adhesives and additives are appropriately stored, handled and labelled according to manufacturer's/supplier's instructions to prevent damage or hazards to personnel 3.2 Coatings, adhesives and additives are stored and used in a manner that ensures use before use-by dates

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.2, 2.3	Recognises text within job specifications and follows written instructions
Writing	2.3, 3.1	Records key information related to job outcomes
Numeracy	2.2	Uses simple mathematical techniques to determine weights and volume required
Navigate the world of work	1.2, 2.1, 3.1	Takes some personal responsibility for adherence to legal and regulatory requirements within industry standards and enterprise procedural frameworks
Get the work done	1.1-1.3, 2.1, 3.2	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources - Takes responsibility for routine low-impact decisions within familiar situations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP211 Prepare ink and additives	ICPSU211C Prepare ink and additives	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP212 Prepare coatings and adhesives

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly prepare coatings and adhesives according to job specifications
- prepare TWO different coatings or adhesives for specific end-use requirements to meet job and workplace specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise selection of coatings/adhesives to match process and job requirements
- describe how to determine suitability of the coatings/adhesives for the particular process
- explain how characteristics of coatings/adhesives are matched to the job/substrate
- explain how to determine if coatings/adhesives adhere to the substrate
- identify health and safety concerns related to preparation, handling and storage of coatings/adhesives
- outline correct handling procedures
- describe details required to calculate quantities of coatings/adhesives
- describe details required to record the formulation of coatings/adhesives
- identify environmental conditions relevant to the storage of coatings/adhesives
- outline conventions for labelling coatings/adhesives
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to coatings, adhesives and substrates.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP216 Inspect quality against required standards

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to inspect quality of work against job specifications.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Carry out inspection of quality during job	1.1 Job is collected/received and inspected against job specifications according to enterprise standards and procedures 1.2 Quality specifications and tolerances are understood and meet client requirements as well as enterprise and industry standards 1.3 Variation to standards are monitored and corrective action taken to rectify problems according to enterprise procedures within the defined work area 1.4 Inspection and testing procedures are applied at regular

ELEMENT	PERFORMANCE CRITERIA
	intervals to determine conformity with specifications and to minimise waste 1.5 Unsatisfactory work is identified according to predetermined standards and enterprise procedures
2. Complete documentation	2.1 Documentation is accurately completed to meet required enterprise procedures 2.2 Problems and suggestions for improvement are documented and passed on to appropriate personnel

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.5, 2.1, 2.2	Recognises text within job specifications and follows written instructions
Writing	2.1, 2.2	Records key information related to job outcomes
Navigate the world of work	1.1-1.5, 2.1	Takes some personal responsibility for adherence to legal and regulatory requirements within industry standards and enterprise procedural frameworks
Interact with others	2.2	Selects from a small range of communication modes, forms and channels to meet a specific purpose within the immediate work environment
Get the work done	1.1, 1.3, 2.2	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources - Takes responsibility for routine low-impact decisions within familiar situations - Begins to identify and implement standard solutions for an increasing number of routine problems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP216 Inspect quality against required standards	ICPSU216C Inspect quality against required standards	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP216 Inspect quality against required standards

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly inspect quality of work against job specifications
- produce a record, maintained over a period of at least one month, which shows that no reasonable complaints or reports of faulty goods or documentation were received from customers (internal or external) relating to work handled by the individual.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Principles of the quality system

- list common faults that need to be recognised
- explain why quality is important

Checking quality requirements before job commencement

- describe quality standards set by the customer
- outline enterprise procedures to achieve quality
- identify areas that need to be inspected for quality

Quality inspection procedures

- outline when quality inspections should be carried out
- explain consequences unnecessary inspections have on production output
- identify control instruments used in a quality inspection
- outline an appropriate response to identified faults
- identify who is responsible for product quality

Documentation procedures

- describe types of specifications recorded on the job sheet
- describe information that needs to be documented, and who should receive this information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP221 Pack and dispatch product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to pack and dispatch basic printed products according to enterprise procedures.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Assess final product	1.1 Finished job is collected/received and checked against job specifications according to enterprise procedures 1.2 Defects, irregularities and discrepancies are identified and action taken according to enterprise procedures
2. Prepare stock for dispatch	2.1 Suitable area for wrapping/packaging is selected and prepared 2.2 Wrapping and packaging materials are prepared according to enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
	2.3 Product is wrapped and packaged in pre-determined parcel sizes according to enterprise procedures, job specifications, storage and delivery specifications 2.4 Packaged goods are checked, weighed and labelled according to delivery instructions, transportation/shipping regulations and enterprise procedures
3. Dispatch product	3.1 Packaged product is stacked on/in appropriate storage/shipping containers prior to dispatch 3.2 Product is dispatched via appropriate delivery mode according to enterprise procedures, job specifications and work health and safety (WHS) requirements 3.3 Product shipping/dispatch details are recorded according to enterprise procedures 3.4 Documentation associated with tasks, where relevant, is accurately completed according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.2-2.4, 3.2-3.4	Recognises text within job specifications and follows written instructions
Writing	2.4, 3.3, 3.4	Records numerical and key information related to outcomes of the job
Numeracy	2.3, 2.4	Uses simple mathematical calculations and arranges sequential numerical information
Navigate the world of work	1.1, 1.2, 2.2-2.4, 3.2-3.4	Takes some personal responsibility for adherence to legal and regulatory requirements with specific reference to safe working practices
Get the work done	1.1, 1.2, 2.1-2.4, 3.1	- Determines priorities and sequences steps involved in clearly defined, familiar tasks, and identifies and assembles required resources - Takes responsibility for routine low-impact decisions within familiar situations - Understands purpose and some specific functions of

		some common digital tools used in work contexts • Begins to identify and implement standard solutions for an increasing number of routine problems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP221 Pack and dispatch product	ICPSU221C Pack and dispatch product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP221 Pack and dispatch product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare, pack and dispatch TWO lots of printed or printing related products, following correct procedures, job and workplace specifications
- accurately complete required documentation for products.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Preparing stock for dispatch

- identify items required in the dispatch process
- describe checks performed prior to packaging the product
- explain how to identify a defective print or item
- explain how defects are rectified

Wrapping and packing materials and methods

- outline work health and safety requirements when wrapping and packing goods
- describe how to determine the type of packaging to be used
- explain how the type of transport or destination has a bearing on the wrapping and packing method
- explain how to determine the number of units to be wrapped in each parcel
- describe details to record on dispatching labels, and why they are required

Dispatching product

- identify where shipping details are obtained
- list weight limitations placed on dispatched products

- describe priorities used for dispatching the product
- explain how to determine the appropriate delivery mode
- summarise how to complete documentation of dispatched product.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to resources and product to pack and dispatch.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP222 Pack and dispatch solid waste

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to pack and dispatch solid waste.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Assess solid waste	1.1 Reusable waste is sorted from recyclable waste according to enterprise procedures 1.2 Waste is weighed, and weight and source of waste recorded
2. Prepare solid waste for removal from site	2.1 Waste is shredded according to enterprise procedures, storage and delivery specifications 2.2 Waste is baled as appropriate for waste destination, delivery method and method of transportation according to enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
3. Dispatch solid waste	3.1 Waste is stacked/packed on/in appropriate storage/shipping containers prior to dispatch 3.2 Waste is dispatched via appropriate delivery mode according to enterprise procedures and job specifications 3.3 Waste is dispatched at pre-determined rate to prevent accumulation of waste around machines 3.4 Documentation associated with tasks is accurately completed according to enterprise procedures
4. Carry out minor routine maintenance and cleaning of waste packaging machines	4.1 Shredder is cleaned, checked and lubricated according to manufacturer's specifications and enterprise standard operating procedures 4.2 Baler is cleaned, checked and lubricated according to manufacturer's specifications and enterprise standard operating procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 2.2, 3.2, 3.4, 4.1, 4.2	Recognises text within job specifications and follows written instructions
Writing	1.2, 3.4	Records key information related to outcomes of the job
Numeracy	1.2, 3.3	Uses simple mathematical calculations and arranges sequential numerical information
Navigate the world of work	1.1, 2.1, 2.2, 3.2, 3.4, 4.1, 4.2	Takes some personal responsibility for adherence to legal and regulatory requirements with specific reference to safe working practices
Get the work done	1.1, 2.2, 3.1-3.3, 4.1, 4.2	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources - Takes responsibility for routine low-impact decisions within familiar situations - Understands purpose and some specific functions of some common digital tools used in work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP222 Pack and dispatch solid waste	ICPSU222C Pack and dispatch solid waste	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP222 Pack and dispatch solid waste

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly pack and dispatch solid waste
- assess, prepare and dispatch TWO lots of solid waste, and maintain and clean waste packaging machines according to job and workplace specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Sorting solid waste

- differentiate between reusable and recyclable waste, and provide an example of each
- describe how reusable waste is stored and used
- identify weight limitations of each batch of solid waste

Processing solid waste

- explain work health and safety (WHS) requirements when operating the shredding machine
- describe capabilities of the shredding machine
- explain how to determine the appropriate baling method

Dispatch and documentation

- outline the appropriate method for storing solid waste prior to dispatching
- describe problems caused by accumulation of waste around machines
- list details recorded when dispatching solid waste
- describe where details for dispatching are obtained

Maintaining waste packaging machines

- identify WHS concerns related to cleaning and maintaining shredding and baling machines
- describe how often these machines should be cleaned and lubricated

Information sources

- outline the relevant information in machine manuals, safety and other documentation relevant to this task

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to solid waste and disposal equipment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP235 Lift loads mechanically

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely use basic lifting equipment such as slings, ropes, shackles, eye bolts and spreader beams.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Attach lifting gear to loads	1.1 All work is undertaken safely and to prescribed procedures 1.2 Load is inspected and best lifting method determined for weight and shape 1.3 Appropriate load shifting equipment is selected 1.4 Lifting gear is inspected and damaged or worn items are labelled and rejected 1.5 Where appropriate, safe working loads are calculated to

ELEMENT	PERFORMANCE CRITERIA
	Australian Standards 1.6 Lifting gear is attached to load in an appropriate and safe manner, and to specifications where required
2. Move loads	2.1 Load moving is performed to acceptable, safe working practices, Australian Standards, codes of practice and specifications 2.2 Lifting gear is connected to load mover using safe and appropriate techniques 2.3 Appropriate communication and signals are used to coordinate load movement safely 2.4 Load is grounded or put down in a safe and stable manner according to prescribed procedure 2.5 All lifting gear is detached from load mover and load

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.4	Recognises text within job specifications and follows written instructions
Writing	1.4	Damaged or worn items are labelled
Oral Communication	2.3	Incorporates verbal signals and whistles to coordinate load movement in a safe manner
Numeracy	1.2, 1.5, 2.1	Uses simple mathematical formulas to calculate loads and holding capacity of various equipment
Navigate the world of work	1.1, 1.5, 1.6, 2.1-2.4	Takes some personal responsibility for adherence to legal and regulatory requirements, with specific reference to safe working practices
Get the work done	1.2-1.4, 2.5	- Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles resources required - Follows clear, step-by-step instructions or procedures to address a small set of identified, routine problems directly relevant to own role

		• Takes responsibility for routine low-impact decisions within familiar situations • Understands purpose and some specific functions of some common digital tools used in work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP235 Lift loads mechanically	ICPSU235C Lift loads mechanically	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP235 Lift loads mechanically

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- safely lift loads using basic equipment such as slings, ropes, shackles, eye bolts and spreader beams
- mechanically lift TWO loads according to enterprise and statutory requirements and regulations.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Attach lifting gear and select appropriate equipment to lift loads

- outline available references to determine safety practices for lifting loads
- describe some important considerations when lifting loads mechanically
- explain how to determine the best method to lift the load
- list various types of mechanical lifting devices, and circumstances under which they are used
- describe the type of damage that can occur to any particular piece of lifting equipment
- outline problems that can occur if lifting gear is not attached properly

Correctly apply safe practices to move loads

- demonstrate knowledge of safe practices to observe when moving loads
- explain conventions to observe when connecting lifting gear to the load mover
- list specific communication techniques used for moving the load
- identify the safe distance for personnel not involved in moving the load
- list other techniques for communication that could be used
- describe effects of a load not being grounded correctly
- outline where lifting gear should be stored after it has been detached

Information sources

- outline the information in machine manuals, safety and other documentation relevant to this task

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to slings, ropes, shackles, eye bolts, spreader beams and loads.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP236 Shift loads mechanically

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to use pallet trucks, overhead travellers and load shifting equipment. It does not include forklifts.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Attach lifting gear to loads	1.1 Routine pre-use checks are undertaken according to manufacturer's specifications and regulatory safety requirements 1.2 Non-compliance with specifications is reported for repair/replacement
2. Move loads	2.1 Type of material is determined from labels, colour codes and signage 2.2 Material properties are understood

ELEMENT	PERFORMANCE CRITERIA
	2.3 Load is inspected and best handling method determined for weight and shape 2.4 All unknowns are clarified with appropriately qualified authority 2.5 All relevant safety and emergency procedures are understood and implemented as required 2.6 All relevant regulations and codes of practices are understood and observed 2.7 Correct and appropriate handling methods are undertaken
3. Shift loads	3.1 Most appropriate load shifting device is selected 3.2 Load shifting device is operated within design specifications and safe working load 3.3 Load is lifted, ensuring balance, vision of operation, and protection of load 3.4 Safe and efficient path of movement is selected and used 3.5 Path of movement is checked and monitored for obstacles and hazards, and safely maintained
4. Place loads	4.1 Loads are placed ensuring safety, stability, protection of material and avoidance of on-site hazards 4.2 Shifting device is removed or secured according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 2.4, 2.6, 3.2, 4.2	Recognises and interprets textual information to determine and adhere to requirements
Writing	1.2, 2.4	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	1.2, 2.4	Uses listening and questioning techniques to confirm requirements

Numeracy	2.3	Uses simple mathematical calculations to calculate loads and volumes
Navigate the world of work	1.1, 2.5-2.7, 3.2, 3.4, 3.5, 4.1, 4.2	Monitors adherence to organisational policies, procedures and regulatory requirements
Get the work done	1.1, 2.3, 3.1, 3.3	- Plans routine tasks with familiar goals and outcomes, taking some limited responsibility for decisions regarding sequencing and timing - Takes responsibility for routine, low-impact decisions within familiar situations - Recognises and responds to predictable routine problems related to role in immediate work context

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP236 Shift loads mechanically	ICPSU236C Shift loads mechanically	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP236 Shift loads mechanically

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- mechanically shift TWO loads using at least an electric trolley, according to enterprise and statutory requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Maintenance and safety checks for load shifting equipment

- explain how often routine checks on equipment should be conducted
- identify who to notify to deal with problems relating to load shifting equipment
- outline circumstances that necessitate replacement of shifting equipment

Determining correct handling methods

- explain the meaning behind different types of material colour codes
- outline personal injuries that might result from incorrect handling methods
- explain how implementation of safety procedures impacts enterprise operations
- identify the statutory authority responsible for regulating safety procedures

Safety requirements for load shifting operations

- describe licensing requirements to operate various load shifting devices
- list causes that might result in a load moving and becoming off balance during a shift
- outline how to choose an appropriate path when shifting the load
- describe the position shifting devices should be placed in after completing the load shift
- explain how incorrect placement of loads affect job requirements and enterprise procedures

- outline the information in machine manuals, safety and other documentation relevant to this task

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to load shifting equipment, not including forklifts.

Assessors must satisfy NVR/AQTF assessor requirements

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP241 Undertake warehouse or stores materials processing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to handle, dispatch and receive materials in a warehouse.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Undertake dispatch/receiving procedures	1.1 Warehouse/store standard operating procedures are understood and followed 1.2 Warehouse/store materials are managed according to enterprise standard operating procedures 1.3 Incoming/outgoing materials are labelled according to enterprise standard operating procedures and legislative requirements 1.4 Warehouse/store materials are labelled and stored according to

ELEMENT	PERFORMANCE CRITERIA
	enterprise standard operating procedures and legislative requirements 1.5 Materials are issued/dispatched according to enterprise standard operating procedures
2. Determine handling methods	2.1 Type of material is determined from labels, colour codes and signage 2.2 Material properties are understood 2.3 All relevant uncertainties and unknowns are clarified with an appropriately qualified authority 2.4 All relevant safety and emergency procedures are understood and implemented as required 2.5 All relevant regulations and codes of practices are understood and observed 2.6 Correct and appropriate handling methods are undertaken
3. Shift loads	3.1 Materials are packaged to meet safety, storage conditions, and site and legislative requirements 3.2 Materials are stored in a safe, orderly and retrievable manner 3.3 Load is lifted, ensuring balance, vision of operation and protection of load 3.4 Materials are labelled/identified and recorded according to site procedures and legislative requirements
4. Store bulk fluids/gases	4.1 Correct storage conditions are determined from instructions and manufacturer's specifications/directions 4.2 Containers are checked for safe and clean use 4.3 Containers are filled/emptied according to enterprise standard operational procedures and legislative requirements 4.4 Containers are handled and moved according to site procedures and legislative requirements 4.5 Containers are correctly labelled and stored according to enterprise standard operational procedures and legislative requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3-1.5, 2.1, 2.2, 2.4, 3.4, 4.1, 4.5	Recognises and interprets textual information to determine and adhere to requirements
Writing	1.3, 1.4, 2.3, 3.4, 4.5	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	2.3	Uses listening and questioning techniques to confirm requirements
Numeracy	3.3	Uses simple mathematical calculations to determine weights and loads
Navigate the world of work	1.2-1.5, 2.2, 2.4-2.6, 3.1, 3.2, 3.4, 4.2-4.5	Follows organisational policies, procedures and legislative requirements
Interact with others	2.3	Uses appropriate communication protocols and conventions to confirm or clarify requirements with external authorities
Get the work done	1.1, 1.2, 3.1-3.4, 4.3-4.5	- Plans routine tasks with familiar goals and outcomes, taking some limited responsibility for decisions regarding sequencing and timing - Takes responsibility for routine low-impact decisions within familiar situations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP241 Undertake warehouse or stores materials processing	ICPSU241C Undertake warehouse or stores materials processing	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP241 Undertake warehouse or stores materials processing

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly handle, dispatch and receive goods in a warehouse/store
- demonstrate handling and storage techniques and procedures for at least THREE different types of goods/materials.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Dispatching and receiving production materials

- outline procedures in place for receipt and inspection of goods on arrival
- list indicators that goods received have been approved for production and comply with the purchase order
- explain reasons why goods have to be labelled according to operating procedures and legislative requirements
- describe procedures in place if dispatched goods do not reach their destination
- outline procedures in place if goods are not received as requested
- identify who is authorised to sign for goods received

Handling methods and procedures

- outline production problems caused by inconsistent stock handling
- explain the procedure for reporting and recording damaged materials
- list alternative uses for damaged stock or materials
- describe the company insurance policy for damaged stock and materials

Storing and packaging of warehouse/store materials

- explain the effect of relative humidity and temperature on substrates
- outline the effect of ultra violet light on exposed rubber blankets or rollers
- explain how materials should be stored in relation to their use-by date or shelf life
- summarise the correct storing of heavy or liquid materials in a shelving system.

Information sources

- outline the information in machine manuals, safety and other documentation relevant to this task

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP243 Reconcile process outputs

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to reconcile process requirements with process outputs, document the information and report any discrepancies.

It applies to individuals who perform a range of mainly routine tasks in a mail house environment or individuals who work in converting, binding and finishing, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm throughputs	1.1 Field values are verified as corresponding to values identified in job sheet 1.2 Where required, mail class is verified as the same as the job sheet 1.3 Collated data is correct and in sequence 1.4 Collated data is correctly matched to addressee

ELEMENT	PERFORMANCE CRITERIA
	1.5 Address information is verified as accurate 1.6 Barcode information confirms correct sequence of addressees to collated information 1.7 Any discrepancies are reported to supervisor
2. Reconcile output	2.1 Total number of throughputs is equal to job specifications 2.2 Destination delivery unit rate matches job specification 2.3 Information matching trail is documented 2.4 Discrepancies are reported to supervisor

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.6, 2.1-2.3	Recognises and interprets textual information to determine and adhere to requirements
Writing	1.7, 2.3, 2.4	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	1.7, 2.4	Uses listening and questioning techniques to confirm requirements
Numeracy	1.3, 1.6, 2.1, 2.2	- Uses simple mathematical calculations and arranges numerical information sequentially - Applies simple calculations to ensure throughputs match job specifications
Interact with others	1.7, 2.4	Uses appropriate communication protocols and conventions to report issues
Get the work done	1.6, 2.1	- Plans routine tasks with familiar goals and outcomes, taking some limited responsibility for decisions regarding sequencing and timing - Takes responsibility for routine, low-impact decisions within familiar situations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP243 Reconcile process outputs	ICPSU243C Reconcile process outputs	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP243 Reconcile process outputs

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly reconcile process requirements with process outputs, document the information and report any discrepancies.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- demonstrate basic literacy skills to follow work instructions and read job specifications
- demonstrate basic numeracy skills to reconcile process outputs.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP260 Maintain a safe work environment

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to ensure work health and safety (WHS) procedures are followed in environments where computers are predominately used, but which may include limited access to chemicals and solvents.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Follow workplace safety procedures	1.1 Hazards in work area are recognised while under direct supervision and reported to appropriate people according to enterprise procedures 1.2 Enterprise procedures and work instructions for assessing and controlling risks for own area of responsibility are followed accurately while under direct supervision 1.3 Enterprise procedures for dealing with incidents (accidents),

ELEMENT	PERFORMANCE CRITERIA
	fire and other emergencies are followed whenever necessary under direct supervision within scope of responsibilities and competencies
2. Contribute to WHS in the workplace	2.1 WHS issues are raised with appropriate people according to enterprise procedures and relevant WHS legislation 2.2 Contributions to participative arrangements for WHS management in the workplace are made within organisational procedures and scope of responsibilities and competencies 2.3 Information matching trail is documented 2.4 Any discrepancies are reported to supervisor
3. Ensure workspace health and safety	3.1 Workspace, furniture and equipment are adjusted to suit ergonomic requirements of the individual 3.2 Lighting is adjusted and glare is reduced to ensure healthy lighting levels 3.3 Work organisation meets organisational and WHS requirements for computer operation
4. Ensure safety from environmental discharges/emissions	4.1 Chemicals and solvents are correctly stored and appropriate ventilation is available when using chemicals and solvents 4.2 Abnormal or unacceptable emission levels are recognised and reported according to enterprise procedures 4.3 Emission levels are monitored and measured according to standard operating procedures where appropriate 4.4 Correct safety procedures are followed and personal protective equipment used properly 4.5 Containment procedures are applied according to standard operating procedures where required 4.6 Waste removal from work area complies with enterprise procedures and environmental regulations

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description

Reading	1.1-1.3, 2.1, 2.2, 4.2, 4.3, 4.6	Recognises and interprets textual information to determine and adhere to requirements
Writing	1.1, 2.1-2.4, 4.2	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	1.1, 2.1, 2.2, 2.4, 4.2	Uses listening and questioning techniques to confirm requirements
Numeracy	4.2, 4.3	Analyses numerical information to measure acceptable and safe emissions in the workplace
Navigate the world of work	1.1, 1.3, 2.1, 2.2, 3.1-3.3, 4.2, 4.4, 4.6	Monitors adherence to organisational policies, procedures and legislative requirements with specific reference to safety
Interact with others	1.1, 2.1, 2.2, 2.4, 4.2	Uses appropriate communication protocols and conventions to report issues
Get the work done	3.1-3.3, 4.1, 4.3, 4.5	- Plans and implements routine tasks with familiar goals and outcomes - Takes responsibility for routine low-impact decisions within familiar situations - Begins to identify and implement standard solutions for an increasing number of routine problems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP260 Maintain a safe work environment	ICPSU260C Maintain a safe work environment	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP260 Maintain a safe work environment

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- follow workplace safety directions/procedures
- recognise and report hazards according to enterprise procedures
- adjust own workspace to meet WHS requirements
- raise work health and safety (WHS) issues
- contribute to participative arrangements for WHS management in the workplace.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline relevant legislation from all levels of government which affect business operations, especially in regard to WHS and environmental issues
- describe how WHS is managed in the workplace, including procedures for fire, emergency, accident and near-miss, and control of risks
- summarise possible workplace hazards
- identify designated personnel responsible for reporting WHS concerns
- explain the meaning of WHS signs and symbols relevant to the area of work.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to appropriate documentation and resources normally used in the workplace.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP261 Follow WHS practices and identify environmental hazards

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to maintain basic work health and safety (WHS) standards in the workplace.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Follow enterprise procedures for hazard identification and risk control	1.1 Hazards in work area are recognised and reported to designated personnel according to enterprise procedures 1.2 Enterprise procedures and work instructions for assessing and controlling risks for own area of responsibility are followed accurately while under direct supervision 1.3 Enterprise procedures for dealing with accidents, fire and emergencies are followed whenever necessary within scope of

ELEMENT	PERFORMANCE CRITERIA
	responsibilities and competencies
2. Follow enterprise procedures for control of environmental discharges/emissions	2.1 Abnormal or unacceptable emission levels are recognised and reported according to enterprise procedures 2.2 Waste removal from work area complies with enterprise procedures and environmental regulations 2.3 Containment procedures are applied according to standard operating procedures where required 2.4 Correct safety procedures are followed and personal protective equipment used properly
3. Contribute to participative arrangements for management of WHS	3.1 WHS issues are raised with designated personnel according to enterprise procedures and relevant WHS legislation 3.2 Contributions to WHS management in the workplace are made within organisational procedures and scope of responsibilities and competencies

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1-2.4, 3.1, 3.2	Recognises text within job specifications and follows written instructions
Writing	1.1, 2.1, 3.1	Records and reports numerical and key information related to outcomes of the job
Oral Communication	1.1, 2.1, 3.1	Uses appropriate vocabulary, including technical language relevant to role and context
Navigate the world of work	1.1-1.3, 2.1, 2.2, 2.4, 3.1, 3.2	Takes personal responsibility for following organisational and legislative requirements associated with own role
Interact with others	1.1, 2.1, 3.1	Uses appropriate communication protocols and conventions to report issues
Get the work done	2.1, 2.3	Plans routine tasks with familiar goals and outcomes, taking some limited responsibility for decisions regarding sequencing and timing

		Begins to identify and implement standard solutions for an increasing number of routine problems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP261 Follow WHS practices and identify environmental hazards	ICPSU261C Follow OHS practices and identify environmental hazards	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP261 Follow WHS practices and identify environmental hazards

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- recognise and report hazards according to enterprise procedures
- follow workplace safety directions/procedures for dealing with hazards and risks
- use personal protective equipment properly
- raise work health and safety (WHS) issues
- contribute to participative arrangements for WHS management in the workplace.
- produce a record, maintained over at least one month, that demonstrates that the individual has followed safe working practices.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Significant hazards in the workplace

- identify the major hazards in this workplace
- outline safety devices on this machine and their functions

Location and use of safety equipment and personnel

- describe the location of fire extinguishers and fire exits
- identify the location of the first aid kit and the first aid officer in own section

Enterprise procedures for dealing with fire and accidents

- explain the procedure for responding to a fire or accident
- identify the relevant person to report any dangerous situation to

Symbols used on WHS signs

- describe the following symbols and what they mean in the workplace:
 - hazardous chemicals
 - goggles
 - footwear
 - fire equipment

Safety data sheets

- describe where safety data sheets are kept and the information they contain
- explain where information about safe levels for discharges or emissions can be found

Information sources

- describe the location of machine manuals, safety and other documentation relevant to this task and outline the information included in them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP262 Communicate in the workplace

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to participate in clear and logical workplace communication, including both written and spoken communication.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Convey and handle information	1.1 Gather, record and convey simple and routine information in a workplace related context 1.2 Personal interaction is conducted in a courteous manner in the workplace context 1.3 Queries are made clearly and concisely in a workplace context 1.4 Procedures for location and storage of information are employed, and the particular workplace practices are adhered to

ELEMENT	PERFORMANCE CRITERIA
	1.5 Information is organised clearly, concisely and logically, and complies with workplace practices 1.6 Workplace documents are completed clearly and accurately within a specified time 1.7 Time is used efficiently in a workplace context
2. Give and follow simple routine instructions	2.1 Safe work practices are incorporated in instructions 2.2 Instructions are accurate, clear, concise and comprehensive, and are consistent with the skills of the receiver 2.3 Appropriate methods of instruction are selected 2.4 Interaction with others is efficient, effective, responsive, courteous and supportive 2.5 Prescribed sequences are adhered to in a workplace related context 2.6 Routine checking of own and others' performance is exercised 2.7 Task is carried out in a workplace related context
3. Participate in small informal work groups	3.1 Interaction is supportive, efficient, effective and courteous 3.2 Participation in discussions takes place in a workplace related context 3.3 Contributions are constructive in terms of the goal 3.4 Group decisions are understood and confirmed
4. Interact with clients	4.1 Interaction with clients within, and external to, an organisation about simple routine matters 4.2 Interaction is consistent with the needs of organisation, and organisation is presented in a positive and client-centred way 4.3 Correct forms of greeting, identification and address are used according to enterprise practices 4.4 Needs of the client are clarified and noted where appropriate 4.5 Referral processes are followed to establish contact between client and appropriate personnel 4.6 Discretion and confidentiality are exercised where appropriate 4.7 Appropriate follow-up steps are taken according to enterprise customer service practices

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1	Recognises text within job specifications and follows written instructions
Writing	1.1, 1.3, 1.5, 1.6, 2.1-2.3, 3.4, 4.3, 4.4	Records numerical and key information related to outcomes of the job
Oral Communication	1.1-1.3, 2.2-2.4, 3.1-3.4, 4.1, 4.3	Uses vocabulary relevant to role and context to convey or clarify information
Navigate the world of work	1.4, 1.5, 2.1, 2.6, 4.3, 4.6, 4.7	- Takes personal responsibility for adherence to legal, ethical and regulatory requirements - Follows organisational policies and procedures
Interact with others	1.2, 2.4, 3.1, 4.1-4.7	- Uses appropriate protocols and conventions when communicating with clients - Establishes connections with a number of people in immediate work context, using some accepted practices for building rapport - Seeks to cooperate with others to achieve results in immediate work context - Adapts personal communication style to build a positive working relationship and show respect for opinions, values and particular needs of others
Get the work done	1.1, 1.4, 1.7, 2.3, 2.5	Plans routine tasks with familiar goals and outcomes, taking some responsibility for decisions regarding sequencing and timing

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP262 Communicate in the workplace	ICPSU262C Communicate in the workplace	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP262 Communicate in the workplace

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- gather, record, convey, organise and store simple written documents logically and in accordance with workplace requirements
- complete workplace documents clearly, accurately and within required timelines
- provide and follow simple verbal and non-verbal instructions, taking into account safe work practices
- use relevant industry terminology in verbal and written interactions
- communicate with colleagues in a manner suitable to the work environment
- interact with clients about simple matters according to enterprise practices.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline why grammar, spelling, diction and pronunciation are important in workplace communications
- explain the requirements for locating and storing workplace information
- outline the enterprise customer services practices
- summarise the workplace documents that can provide assistance with task requirements.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP263 Perform basic industry calculations

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to perform basic trade calculations and measurements.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Calculate costs and dimensions	1.1 Additions, subtractions, multiplications and divisions of costs and dimensions are correctly calculated 1.2 Material and time costs are correctly calculated for elements of a job/brief 1.3 Percentages of cost and time are correctly calculated to fulfil requirements of a job/brief 1.4 Results of calculations are correctly recorded

ELEMENT	PERFORMANCE CRITERIA
2. Calculate area, density and volume	2.1 Density and/or volume of fluids and colours are correctly calculated and applied 2.2 Percentages of densities and volumes are correctly calculated to fulfil requirements of a job/brief
3. Use basic measuring tools and apply results of measurement	3.1 Appropriate measuring tools are selected and used correctly and accurately 3.2 Measurements are correctly interpreted and used in appropriate calculations

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 2.2	Recognises text within job specifications and follows written instructions
Writing	1.4	Records numerical and key information related to outcomes of the job
Numeracy	1.1-1.4, 2.1, 2.2, 3.2	Uses simple mathematical calculations to determine weights, areas and volumes required by various tasks
Get the work done	3.1	Plans and implements routine tasks with familiar goals and outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP263 Perform basic industry calculations	ICPSU263C Perform basic industry calculations	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP263 Perform basic industry calculations

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- perform numerical calculations involving basic arithmetic, percentages and geometry to calculate costs, dimensions, weights, areas, density and volumes
- complete activities using basic measuring tools used in the printing industry
- document the results of calculations.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain how to perform quick approximations of expected answers
- describe parallax errors and how they affect measurements
- explain how acceptable tolerances in measurement are determined
- list the measuring tools available in the workplace and briefly describe the function of each tool.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP271 Provide basic instruction for a task

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to convey technical information to an individual client for their specific use, in a clear, concise and coherent manner.

It applies to individuals who are skilled workers and are required to instruct other workers in a task during normal work.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for training	1.1 Check with the individual that training is required, and conditions are suitable for training 1.2 Check that any necessary equipment is available 1.3 Check that instructor and trainee have sufficient time available
2. Instruct trainee in task	2.1 Instruct trainee in task using appropriate techniques 2.2 Provide individual with details of required knowledge about potential problems and causes of failure

ELEMENT	PERFORMANCE CRITERIA
	2.3 Provide individual with information about potential hazards 2.4 Allow individual to practise task under supervision 2.5 Encourage individual to ask questions and provide feedback
3. Check learning has taken place	3.1 Check the individual can perform task to required standard 3.2 Check the individual is aware of potential problems and causes of failure 3.3 Check the individual is aware of potential hazards and knows how to avoid them
4. Arrange for necessary follow-up training	4.1 Estimate individual's level of skill and their requirements for follow-up training, if required 4.2 Arrange for appropriate follow-up training or supervised practice sessions, if required

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.1	Recognises text within job specifications and follows written instructions
Writing	1.1, 2.1	Records key information related to outcomes of the job
Oral Communication	1.1, 1.3, 2.1-2.3, 2.5, 3.3,	- Conveys information using relevant language suitable to the audience - Employs listening and questioning techniques to confirm understanding
Interact with others	2.4, 3.1	Seeks to cooperate with others to achieve results in immediate work context
Get the work done	1.1, 1.2, 1.3, 4.1, 4.2	Plans routine tasks with familiar goals and outcomes, taking some limited responsibility for decisions regarding sequencing and timing

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP271 Provide basic instruction for a task	ICPSU271C Provide basic instruction for a task	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP271 Provide basic instruction for a task

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- on TWO separate occasions:
 - plan a training session taking into account what needs to be delivered, timeframes, trainee needs and equipment requirements
 - use appropriate techniques to clearly, concisely and coherently provide technical information to a trainee
 - check that the trainee can perform the required task safely and effectively
 - evaluate whether the trainee's level of skill is sufficient and organise appropriate follow-up, if required.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline questioning and active listening techniques for conveying and clarifying information
- explain how to use basic negotiation skills in relation to other team members
- explain how to utilise basic demonstrating and explaining skills.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP280 Enter data into electronic system

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to retrieve and amend job information from production machinery and document changes according to the particular production stage.

It applies to individuals who access job specifications and document changes using an electronic system. This unit can be applied to a wide range of machines to access job information and transfer information for the next production stage.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Access data	1.1 Data required for the job is called up electronically using industry program 1.2 Data is checked and amended to conform to job specifications
2. Input data	2.1 Load moving is performed to acceptable safe working practices, Australian Standards, codes of practice and specifications

ELEMENT	PERFORMANCE CRITERIA
	2.2 Data is checked to ensure output conforms to job requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.2	Recognises text within job specifications and follows written instructions
Writing	1.2	Records key information related to outcomes of the job
Numeracy	2.2	Checks output data against job requirements
Navigate the world of work	2.1	Complies with legal and regulatory requirements
Get the work done	1.1, 1.2	Understands purpose and some specific functions of some common digital tools used in work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP280 Enter data into electronic system	ICPSU280C Enter data into electronic system	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP280 Enter data into electronic system

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- consistently and accurately access and enter data into a machine console or electronic system.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise work health and safety and other requirements in relation to load moving
- summarise the processes for accessing and entering data into the electronic system
- explain how to transfer an electronic file across different computer platforms
- explain necessary steps if a file fails to transfer correctly
- list the programs used to manage this file
- explain steps to ensure correct file format is used, and consequences of using an incorrect file format.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP281 Use computer systems

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to perform basic functions on a computer.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Use a stand-alone computer/terminal correctly	1.1 Correct posture at the keyboard is adopted according to work health and safety (WHS) requirements 1.2 Data is correctly accessed to ensure no loss of data 1.3 Data is manipulated correctly to ensure access, retrieval and storage of data
2. Perform computer/terminal	2.1 Data is accessed, saved and retrieved for reference and amendment

ELEMENT	PERFORMANCE CRITERIA
functions	2.2 Appropriate program is selected for the job to be undertaken 2.3 Mouse and/or keyboard functions are used correctly to operate the computer systems used in the printing industry 2.4 Features of applications are used correctly to deliver a specified output 2.5 Data is saved in correct format and file location 2.6 Master pages, templates and style sheets, as appropriate, are used consistently to ensure data is the same after exchange or transfer

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.3, 2.1, 2.5, 2.6	Recognises text within job specifications and follows written instructions
Writing	1.3, 2.4	Records key information related to outcomes of the job
Navigate the world of work	1.1	Understands rights and responsibilities and complies with legal and regulatory requirements
Get the work done	1.2, 1.3, 2.1-2.6	Understands purpose and some specific functions of some common digital tools used in work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP281 Use computer systems	ICPSU281C Use computer systems	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP281 Use computer systems

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly and safely perform basic functions on a stand-alone computer/terminal using industry software
- use a stand-alone computer/terminal with at least TWO software applications relevant to the printing industry to create or access files, perform various computing functions, and save files in required format and location.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the work health and safety requirements when performing keyboarding tasks

Starting, operating and shutting down the computer

- Explain when computer power should be turned off
- describe how to start or stop using the computer
- explain appropriate procedures for using and sharing a password
- outline how to access alternative file storage devices

Basic typing skills

- show base finger positions on the keyboard
- explain benefits of typing at an even and consistent pace

Use of applications

- explain how to produce a compressed file
- list and briefly describe the functions of master pages, templates, style sheets and macros
- describe the workplace requirements for saving files.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to a stand-alone computer or terminal.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP282 Undertake basic machine maintenance

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to safely perform basic, routine maintenance of machines and equipment with minimum down-time.

It applies to individuals who perform a range of mainly routine tasks in various sectors of the printing and graphic arts industry, using limited practical skills and fundamental knowledge in a defined context. They generally work under supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan and prepare for maintenance	1.1 Maintenance schedule is read and task requirements are determined 1.2 Work health and safety (WHS) standards, statutory requirements, relevant Australian standards, codes of practice, manufacturers' specifications, environmental requirements and enterprise procedures are identified, applied and monitored throughout the work procedure. 1.3 Resources required are identified and obtained according to

ELEMENT	PERFORMANCE CRITERIA
	manufacturer's recommendations and enterprise standard operating procedures
2. Carry out maintenance	2.1 Machine or equipment is isolated safely or checked for isolation 2.2 Units or machine sections are cleaned, checked and lubricated according to manufacturer's recommendations and workplace standard operating procedures 2.3 Feeders and conveyers are cleaned, checked and lubricated according to manufacturer's recommendations and enterprise standard operating procedures 2.4 Safety devices, gears and bearings are checked, lubricated and maintained according to manufacturer's recommendations and enterprise standard operating procedures 2.5 Machine consumables are checked and replaced if worn or damaged 2.6 Basic maintenance is carried out according to WHS requirements
3. Complete maintenance	3.1 Any wear and tear to machinery is documented and/or referred to appropriate person for action 3.2 Any consumables used are documented for reordering 3.3 Used consumables are disposed of correctly according to enterprise procedures and WHS requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1-2.3, 3.1	Recognises relevant text within job specifications and follows written instructions
Writing	3.1, 3.2	Records key information related to outcomes of the job
Oral Communication	3.1	Clearly articulates requirements using language appropriate to audience and environment

Numeracy	3.2	Uses simple mathematical calculations and arranges sequential, numerical information
Navigate the world of work	1.2, 2.1-2.4, 2.3, 2.3, 3.3	Takes some personal responsibility for adherence to legal and regulatory requirements with specific reference to safe working practices
Interact with others	3.1	Uses appropriate communication protocols and conventions to report issues
Get the work done	1.1, 1.3, 2.1, 2.2, 3.1, 3.2	- Determines priorities and sequences steps involved in clearly defined familiar tasks, and identifies and assembles required resources - Follows clear instructions or procedures to address routine problems directly relevant to own role - Takes responsibility for routine low-impact decisions within familiar situations - Understands purpose and some specific functions of some common digital tools used in work contexts

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Machine or equipment MUST include at least 2 of the following:	- reel handling system - sheet or object handling systems - printing units - ancillary units - cutting units - folding/collating units - fastening units.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP282 Undertake basic machine maintenance	ICPSU225C Perform small machine maintenance	Substantial changes to remove necessity to provide access to all types of equipment. Content updated to reflect current industry practice.	Equivalent unit
	ICPSU224C Perform basic machine maintenance	Element 1 – preparation for maintenance added. Element 2 combines previous elements 1 & 2. Element 3 – minor changes and incorporates previous PC 1.2.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP282 Undertake basic machine maintenance

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly and safely carry out routine maintenance on small machines or equipment with minimum down-time
- carry out routine maintenance on any TWO pieces of equipment or systems, satisfying job, workplace and statutory requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Reel handling system

- list Work Health and Safety (WHS) requirements when maintaining and cleaning the reel handling system
- outline common causes of failure or breakdown
- describe precautions for working with compressed air
- describe damage that can be caused to electronic sensors during cleaning
- list checks performed on this area of the machine
- explain how to determine appropriate chemicals for cleaning purposes

Sheet or object handling systems

- identify WHS requirements for maintaining and cleaning the sheet or object handling system
- list common causes of failure or breakdown
- describe problems caused by inefficient cleaning
- list parts of this area of the machine that require cleaning
- outline the effect excessive lubricant has in this area of the machine

- explain the need for regular maintenance in this area of the machine

Printing units

- identify WHS requirements for maintaining and cleaning the printing units
- list common causes of failure or breakdown
- outline potential problems of continual inefficient washing of roller surfaces
- explain why it is necessary to clean bearers on all cylinders in the printing unit
- describe problems that can result from cylinder bodies being cleaned incorrectly
- list safety devices that need to be checked in the printing unit
- explain what to do if a safety device is inoperative
- outline checks to be carried out when replacing rollers in the inking system

Ancillary units

- list WHS requirements for maintaining and cleaning ancillary units
- identify common causes of failure or breakdown
- outline checks to perform on ancillary units
- explain precautions for cleaning ancillary units

Cutting units

- identify WHS requirements for maintaining and cleaning cutting units
- list common causes of failure or breakdown
- outline checks to be carried out on cutting devices and knives
- explain how to correctly store cutting knives after replacement
- outline problems likely if the machine bed is not maintained
- describe problems likely if blades or knives are not maintained

Folding/collating units

- identify WHS requirements for maintaining and cleaning folding/collating units
- list common causes of failure or breakdown
- outline components to check with this equipment
- describe problems with inefficient cleaning of the folding/collating unit
- identify parts of this machine that require cleaning
- name the type of lubricant to use on this equipment and why

Fastening units

- list WHS requirements for maintaining and cleaning fastening units
- identify common causes of failure or breakdown
- outline chemicals to use when cleaning this equipment
- explain how to correctly dispose of used chemicals
- explain how frequently this equipment should be cleaned
- describe problems likely to occur after inefficient cleaning
- identify parts of the equipment that must be cleaned
- outline consequence of excessive lubricant in this part of the machine

Information sources

- describe location of machine manuals, safety and other documentation relevant to this task, and outline the information included.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to machines or units and consumables.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP311 Prepare ink and additives (advanced)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare inks and additives for special colour work or other special purpose inks.

It applies to individuals who perform a range of defined tasks relating to the printing and screen printing industry, and who may also provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPSUP211	Prepare ink and additives

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Select ink for special colour work or other	1.1 Inks and additives are selected according to job specifications 1.2 Quality and suitability of inks or additives are checked and

ELEMENT	PERFORMANCE CRITERIA
specialised purpose	appropriate action is taken to meet quality standards of client requirements and enterprise and industry standards 1.3 Inks are selected according to end-use of product, suitability of substrate, adhesion, physical and chemical resistance, light fastness, drying method and print process
2. Maintain and calibrate equipment	2.1 Equipment is inspected to ensure it is functional, and where necessary appropriate remedial action is taken prior to commencement 2.2 Equipment is calibrated, cleaned and adjusted according to manufacturer's/supplier's instructions
3. Prepare ink for special colour work or other specialised purpose	3.1 Inks and additives are prepared according to work health and safety (WHS) requirements and manufacturer's/supplier's instructions with suitable precautions to minimise waste 3.2 Correct colour and weight/volume of ink are calculated, mixed and prepared to match requirements of the job specification and the printing machine to be used 3.3 Formulation of ink and approved colour is appropriately recorded
4. Store and handle ink	4.1 Inks and additives are appropriately stored, handled and labelled according to manufacturer's/supplier's instructions to prevent damage and hazards to personnel

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.2, 3.1, 3.2, 4.1	Recognises and interprets textual information to establish job requirements from relevant information
Writing	3.3, 4.1	Uses clear, specific and industry-related terminology to complete and update workplace documentation
Numeracy	2.2, 3.1-3.3	Uses basic mathematical formula to calculate whole numbers and decimals to determine supplies quantities
Navigate the world of	1.2, 3.1, 4.1	Recognises and follows organisational and legislative requirements associated with own role

work		
Get the work done	1.1-1.3, 2.1, 2.2, 3.1, 4.1	• Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency • Initiates standard procedures when responding to familiar problems within immediate context • Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to complete routine tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP311 Prepare ink and additives (advanced)	ICPSU311C Prepare ink and additives (advanced)	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP311 Prepare ink and additives (advanced)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare at least TWO different lots of ink and additives that require special colour matching and match colour sample by manual and electronic means
- select suitable ink types for different substrates
- meet client requirements, job specifications, enterprise and industry standards when selecting, preparing, storing and handling ink or additives, and using equipment.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify manuals, safety and other documentation needed for this task and briefly outline the relevant information in each source

WHS requirements

- outline work health and safety (WHS) requirements for operating machinery or equipment
- identify health hazards of using inks, solvents and additives
- list pollution and environmental issues to be considered when working with inks and additives
- summarise the enterprise procedures for working safely

Ink/additives and test substrate compatibility

- describe substrate characteristics and the end use of the substrate
- explain why ink colour fastness needs to be determined and considered
- explain how to determine whether ink will adhere to the substrate
- explain how to test compatibility of solvents, monomers and additives with ink

Ink quantity and match sample by hand/computer

- explain the formula for calculating the correct quantity of ink
- outline details required to calculate ink quantity
- list any computer-based packages used to calculate ink quantity

Ink and check consistency and colour

- explain the effect of ink coverage on screen mesh, machine and squeegee
- describe the software program(s) used for matching colours and required inputs
- describe ideal conditions for matching colours
- explain the effect white mixed in colour has on finished colour light fastness
- describe methods for checking and adjusting ink colour and consistency
- list machine characteristics and other parameters that affect ink deposit and consequently colour
- describe effects of viscosity changes in ink

Ink type and record information

- explain procedures for recording formulation, by hand or by computer
- identify who approves the mixed colour prior to commencing production
- identify the process for recording the recipe for the colour

Storage, handling and labelling

- explain systems for labelling mixed inks
- describe environmental conditions in place for ink storage
- explain where to find manufacturer's specifications and MSDSs.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to inks and additives.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP321 Pack and dispatch (advanced)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to coordinate and supervise packing and dispatch of printed products.

It applies to individuals who perform a range of defined tasks relating to the printing and graphic arts industry, and who may also provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Assess final product	1.1 Finished job is collected/received and checked against job specifications according to enterprise procedures 1.2 Defects, irregularities and discrepancies are identified and action taken according to enterprise procedures
2. Assess wrapping and packaging requirements	2.1 Work instructions are checked to determine any specific customer wrapping and packaging requirements 2.2 Product is assessed to determine wrapping, parcelling and

ELEMENT	PERFORMANCE CRITERIA
	packaging requirements 2.3 Product destination and delivery time are confirmed to determine most appropriate delivery mode 2.4 Transportation/shipping requirements are determined
3. Prepare stock for dispatch	3.1 Suitable area for wrapping/packaging is selected and prepared 3.2 Wrapping and packaging materials are prepared 3.3 Product is wrapped in pre-determined parcel sizes as required 3.4 Product is packaged as appropriate to product size, type, destination, delivery route and method of transportation, according to workplace instructions, transportation/shipping regulations and work health and safety (WHS) requirements 3.5 Packaged goods are weighed using appropriate weighing machines and scales, and labelled according to delivery instructions, transportation/shipping regulations and enterprise procedures
4. Dispatch product	4.1 Packaged product is stacked on/in appropriate storage/shipping containers prior to dispatch 4.2 Product is dispatched via appropriate delivery mode according to workplace instructions, enterprise procedures and WHS requirements 4.3 Product shipping details are recorded according to enterprise procedures 4.4 Delivery schedules are monitored and amended as required according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 3.3-3.5, 4.2-4.4	Recognises relevant text within job specifications and enterprise documents and follows written instructions
Writing	3.5, 4.3, 4.4	Uses clear, specific and industry related terminology to complete and update workplace documentation

Oral Communication	2.1, 2.3, 2.4	• Uses vocabulary suitable to audience to convey information • Uses listening and questioning techniques to confirm understanding
Numeracy	2.3, 3.3, 3.5	• Uses simple mathematical calculations and arranges numerical information sequentially
Navigate the world of work	1.1, 1.2, 3.4, 3.5, 4.2-4.4	• Recognises and follows organisational and legislative requirements associated with own role
Get the work done	1.2, 2.2-2.4, 3.1-3.3, 4.1, 4.4	• Takes responsibility for planning, organising and implementing tasks required to achieve required outcomes • Initiates standard procedures when responding to familiar problems or making work related decisions • Understands purposes, specific functions and key features of common digital systems and tools and operates them effectively to complete routine tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP321 Pack and dispatch (advanced)	ICPSU321C Pack and dispatch (advanced)	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP321 Pack and dispatch (advanced)

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- supervise wrapping and packing of a variety of printed matter (at least THREE lots), and dispatch goods to at least THREE destinations according to job sheet specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Quality checking of printed matter for defects and discrepancies

- give examples of defective print or items and explain how each defect can be rectified
- explain how to check the job against job specifications

Specific customer instructions for wrapping, packing and dispatching

- explain how to check customer's specific requests for wrapping and packing
- explain how to ascertain quantities required for each destination

Wrapping and packing materials, methods and equipment used

- outline work health and safety (WHS) concerns when using packaging materials and equipment
- identify requirements for mechanical and manual wrapping
- list the modes of transport used to transfer loads and describe the packing requirements for each mode of transport

Use of weighing machines, scales and labelling equipment

- identify the critical weight of each parcel for dispatch purposes
- explain importance of weighing and noting the weight of each parcel
- identify necessary labelling requirements

Use of pallet trucks, forklifts and storing and loading goods

- identify WHS requirements and safety measures for use of forklifts
- describe restrictions in place for personnel in the use of forklifts
- identify maximum weight the pallet truck/forklift can lift
- list checks in place to ensure goods are correctly loaded onto transport to prevent damage during transit

Monitoring delivery schedules

- identify ways of ensuring time of delivery at each destination complies with client's requirements
- outline procedures in place if parcels do not reach their destination

Information sources

- explain where to find relevant machine manuals, safety and other documentation and outline the information in each source

Modes of transport and writing of consignment notes

- list factors that affect the mode of transport chosen for a particular consignment
- explain the process for arranging the pickup of the consignment by the transport company
- describe the labels required on the goods to ensure delivery to the right destination
- outline the consignment note/dispatch documentation to be completed
- explain why the signature of the driver and time of dispatch must be noted on documentation.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to resources and product to pack and dispatch.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP323 Dispose of waste

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to dispose of waste according to enterprise procedures and government regulations.

It applies to individuals who perform a range of defined tasks relating to the printing and graphic arts industry, and who may also provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare waste	1.1 Waste is stored according to work health and safety (WHS) and Environmental Protection Authority (EPA) requirements 1.2 Waste treatment system is monitored to ensure correct operation and changes to procedures are recommended if required 1.3 Waste is treated, if necessary, to ensure compliance with workplace and EPA standards
2. Dispose of waste	2.1 Appropriate disposal is arranged with regard to waste quality,

ELEMENT	PERFORMANCE CRITERIA
	quantity and EPA and government regulations 2.2 Waste is disposed of in an appropriate way to ensure compliance with workplace and EPA standards 2.3 Any subcontractors are checked to ensure they comply with EPA and government regulations 2.4 Wastage rates are documented or collated for further review

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.4	- Comprehends information in complex texts including regulations and legislation - Interprets written instructions
Writing	1.2, 2.3, 2.4	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	2.3	- Uses vocabulary suitable to audience to convey information - Uses listening and questioning techniques to gather or confirm information
Numeracy	1.2, 2.1, 2.4	Uses simple mathematical calculations and arranges sequential numerical information
Navigate the world of work	1.1, 2.1, 2.2, 2.3	Recognises and follows organisational and legislative requirements associated with own role
Get the work done	1.2, 2.1, 2.3, 2.4	Takes responsibility for planning, organising and implementing tasks required to achieve required outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP323 Dispose of waste	ICPSU323C Dispose of waste	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP323 Dispose of waste

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- treat and dispose of TWO lots of waste according to enterprise and statutory requirements and regulations.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain consequences of a company having excess waste
- summarise how to follow segregating and packaging requirements for correct disposal
- outline appropriate handling methods
- outline consequences of incorrectly handling waste
- identify appropriate storage method
- demonstrate how to check results obtained against enterprise and statutory details
- list details recorded when recording results of liquid waste treatment
- explain why equipment must be kept clean and maintained
- explain where to find relevant manuals, safety and other documentation and outline the information included in each source
- identify work health and safety (WHS) concerns related to operating, cleaning and maintaining waste testing equipment
- outline the Environmental Protection Authority requirements regarding storage and disposal of waste
- describe WHS regulations on the handling of waste

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to waste and waste disposal equipment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP342 Undertake inventory procedures

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to use inventory procedures and requisitioning.

It applies to individuals who perform a range of defined tasks relating to the printing and graphic arts industry, and who may also provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Use inventory procedures	1.1 Inventory procedures are understood and carried out according to enterprise standard operating procedures 1.2 Requisition, purchase, shipping and invoice documentation is used as required according to enterprise standard operating procedures 1.3 Inward/outward recording/filing system is understood, accessed and maintained according to enterprise standard operating procedures

ELEMENT	PERFORMANCE CRITERIA
	1.4 Customer orders are maintained according to enterprise standard operating procedures 1.5 Returned orders are booked back according to enterprise standard operating procedures
2. Requisition goods	2.1 Requisition procedures are understood and carried out according to enterprise standard operating procedures 2.2 Goods are requisitioned on time 2.3 All recording is completed and filed correctly according to enterprise standard operating procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.5, 2.1, 2.3	Recognises text within job specifications and follows written instructions
Writing	1.1-1.5, 2.3	Uses clear, specific and industry related terminology to complete and update workplace documentation
Numeracy	1.1-1.5, 2.3	Uses simple mathematical calculations to complete workplace requirements
Get the work done	1.1-1.5, 2.1-2.3	- Follows standard operating procedures to plan, organise and implement tasks - Uses familiar digital systems and tools to access, organise, analyse and display information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP342 Undertake inventory procedures	ICPSU342C Undertake inventory procedures	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP342 Undertake inventory procedures

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- apply inventory and enterprise procedures for supply or requisition of goods
- compile a portfolio of inventory paperwork over a period of ONE month that shows correct implementation of inventory procedures and requisitioning of goods.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Standard operating procedures to maintain inventory

- describe the effect poor inventory control can have on organisational procedures
- explain the difference between requisitioning and purchasing
- list the type of goods and materials filed under incoming or inward
- list the type of goods and materials filed under outgoing or outward
- explain how to maintain accurate recording and filing systems for inward/outward goods
- summarise how to accurately maintain customer's orders
- discuss why an order might be returned
- explain why checks are conducted on returned goods
- identify when goods should be replenished

Routine stocktaking

- describe the system used for stocktaking different types of goods (eg inks, substrates, consumables, perishables)
- identify who is responsible for calculating value of stock at the date of stocktake
- list records of stock value that are kept
- describe the system in place for segregating non-current stock

Requisitioning and recording of goods

- identify who has the authority to approve requisition of goods
- outline any special approval required for requisition of certain goods or materials
- explain procedures to indicate goods received have been approved for production and comply with the purchase order
- describe procedures in place for urgent requisition of goods
- list additional information that may need to be recorded prior to filing requisition orders.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP345 Purchase materials and schedule deliveries

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the knowledge required to purchase materials and schedule deliveries for production and/or storage. It is applicable to a production section or a stores/warehouse.

It applies to individuals who perform a range of defined tasks relating to the printing and screen printing industry, and who may also provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify material requirements	1.1 Customer/client is consulted as appropriate and customer order specifications detailed 1.2 Supporting production data is examined 1.3 Required materials are identified including type, quality and quantity 1.4 Required quantities are estimated according to predetermined standards

ELEMENT	PERFORMANCE CRITERIA
	1.5 Purchase order/list is developed according to enterprise standard operating procedures
2. Purchase materials and schedule deliveries	2.1 Delivery requirements are determined from production plan 2.2 Supplier/vendor is informed of requirements and specifications 2.3 Supply/purchasing schedules are adjusted where required according to enterprise standard operating procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1	Recognises relevant text in orders and enterprise documentation
Writing	1.1, 1.4, 1.5, 2.2, 2.3	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	1.1, 2.2	Clearly explains requirements using language appropriate to audience and environment
Numeracy	1.2-1.5, 2.1-2.3	Uses simple mathematical calculations and techniques to examine production data and determine material requirements
Navigate the world of work	1.4	Takes personal responsibility for adherence to enterprise standards
Get the work done	1.3, 1.5	Takes responsibility for planning, organising and implementing tasks according to standard operating procedures

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP345 Purchase materials and schedule	ICPSU345C Purchase materials	Updated to meet Standards for Training	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
deliveries	and schedule deliveries	Packages	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP345 Purchase materials and schedule deliveries

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify type, quality and quantity of materials required according to order specifications and enterprise procedures
- correctly purchase materials and arrange delivery
- produce a portfolio of paperwork that shows purchasing of materials and scheduling of deliveries over a period of at least ONE month, where there were no major interruptions to production caused by absence of materials, and no excess materials in stock.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Determining materials and purchasing requirements

- explain how to obtain customer order specifications
- explain the need to keep an accurate stock control system
- outline the stock control systems in place
- explain how to determine when stock needs replenishing
- describe when it is appropriate to ask a customer or client to verify verbal instructions

Purchasing procedures

- describe preferred suppliers and the products they supply
- explain who should raise an order and where
- describe which contracts are listed for purchase orders
- explain reasons for purchasing contracts
- identify who is responsible for determining the required quantity in the order
- outline special instructions that can be listed on orders

- outline how to maintain accurate purchasing records

Scheduling materials delivery

- describe the actions required if delivery requirements cannot be met
- explain why purchasing schedules may need adjustment
- explain effects atmospheric conditions and light can have on materials in storage.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP351 Undertake basic production scheduling

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to schedule production for a small work unit.

It applies to individuals who perform a range of defined tasks relating to pre-press, printing, screen printing, converting or finishing. They may also provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify production requirements and capacities	1.1 Printing, converting and finishing production data is identified 1.2 Inventory capacities and requirements are identified 1.3 Procurement and supply requirements and constraints are identified 1.4 Production capacity for the workgroup is identified 1.5 Production constraints for the workgroup are identified 1.6 Standard times for the workgroup are identified

ELEMENT	PERFORMANCE CRITERIA
2. Prepare production schedule for small work unit	2.1 Scheduling is done in conjunction with overall scheduling of other units and processes 2.2 Production schedule is prepared according to production, inventory, procurements, time constraints and supply capacities and requirements 2.3 Schedule is documented according to enterprise procedures 2.4 Schedule is modified as required
3. Monitor production	3.1 Production is monitored 3.2 Any necessary changes in scheduling, and reasons for this, are reported according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3	Recognises text within job specifications and follows written instructions
Writing	2.1-2.4, 3.2	Uses clear, specific and industry related terminology to complete and update workplace documentation
Numeracy	1.2, 1.4, 1.6	Uses simple mathematical calculations and arranges numerical information sequentially
Navigate the world of work	2.3, 3.2	Takes personal responsibility for adherence to enterprise policies procedures and standards
Get the work done	1.1-1.6, 2.1, 2.2, 3.1	- Takes responsibility for planning, organising and implementing tasks to achieve required outcomes, taking a range of factors into consideration - Monitors outcomes of plans to inform decisions about possible changes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP351 Undertake basic production scheduling	ICPSU351C Undertake basic production scheduling	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP351 Undertake basic production scheduling

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- effectively schedule production for a small unit in pre-press, printing, screen printing, converting or finishing according to enterprise procedures
- produce a portfolio that documents ONE month's scheduling activities and covers identifying production requirements and capacities, preparing a production schedule and monitoring production.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Production requirements and capacities

- describe the relationship between job requirements and production processes
- list and describe special production requirements and possible problems that special requirements may cause
- outline criteria used to determine availability of machines, materials and labour
- explain work health and safety (WHS) concerns to consider when planning production

Checking stock levels

- explain how stock levels are checked
- identify information to obtain from outside suppliers that will allow job priorities to be established
- describe the system used to select suppliers

Preparation and documentation of the production schedule

- explain how to determine production workflow

- identify the system used to work out job priorities
- describe the purpose of documenting production workflow
- explain how to communicate schedules to the workforce

Revising schedules

- outline how to monitor and amend production schedules
- describe the factors to consider if a production schedule is being revised.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP352 Plan operational processes

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to develop and plan for new, or to modify existing, operational or production processes.

It applies to individuals who perform a range of defined tasks relating to the printing and graphic arts industry, and may also provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify production requirements	1.1 Overall production schedule is examined to identify production requirements 1.2 Material requirements are identified according to production requirements 1.3 Current processes are identified in consultation with other staff
2. Review customer order specifications	2.1 Customer order specifications are obtained and examined 2.2 Supporting production data is examined

ELEMENT	PERFORMANCE CRITERIA
	2.3 Production process to be used is determined based on information supplied in production plan
3. Determine process operations	3.1 Existing process operations are reviewed in consultation with management 3.2 Existing problems are clarified with team and customers 3.3 Work operations required are identified in consultation with team 3.4 Suitable machinery or equipment is identified in consultation with team 3.5 Cost and duration are estimated against production estimates 3.6 Recommendations on possible solutions are made and documented
4. Determine production sequence	4.1 Steps required for the process are identified 4.2 Material and equipment requirement lists are prepared and documented 4.3 Quality assurance steps and specifications are identified 4.4 Process steps are documented and clearly represented

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1-2.3, 3.1-3.6, 4.1-4.3	Recognises relevant text within job specifications, plans and production data
Writing	1.1-1.3, 3.1-3.6, 4.1-4.4	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	3.1-3.4	Clearly explains requirements using language appropriate to audience and environment
Numeracy	3.5	Uses basic mathematical calculations related to budget and workplace scheduling
Interact with	3.2-3.4	Cooperates with others as part of familiar routine activities, and contributes to specific activities

others		requiring joint responsibility and accountability
Get the work done	1.2, 2.1, 2.3, 3.2, 3.6, 4.1, 4.2	- Plans and organises tasks required to achieve outcomes, including acquiring necessary resources and workplace scheduling - Takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP352 Plan operational processes	ICPSU352C Plan operational processes	Updated to meet Standards for Training Packages	No equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP352 Plan operational processes

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce a portfolio that includes documentation showing planning of operational processes (either a new process or modification of an existing process) in any ONE of pre-press, printing, screen printing, converting, binding and finishing, corrugating or laminating.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Production requirements

- summarise production plan information that will aid in determining a suitable production process
- explain the relevance of production schedules, material requirements and customer requirements to process operations
- describe the possible impacts of changes to process technology or product on existing production areas including:
 - whether existing machinery or equipment can be utilised
 - special provisions needed for new equipment or machinery
 - expected production life of equipment

Reviewing, testing and costing

- explain the method used to review existing processes
- explain the methods used to estimate costs and cost savings
- explain the role of test and trials in identifying suitable processes

Determining production sequence

- explain how steps for the process and equipment and material requirements are identified and documented
- explain how quality assurance requirements are identified

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP357 Apply quick changeover procedures

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to carry out quick operational changeovers and recommend improvements within the scope and authority of the job.

It applies to individuals who perform a range of defined tasks relating to the printing and print finishing industry, who may also provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for changeover	1.1 Timing of changeover is determined according to production schedule 1.2 All required tools/parts/materials are obtained for changeover 1.3 Process and tools/parts/materials are organised ready for changeover 1.4 Liaison with relevant people is conducted for quick changeover
2. Make quick	2.1 Quick changeover is planned according to quick changeover

ELEMENT	PERFORMANCE CRITERIA
changeover	principles 2.2 Changeover is completed according to enterprise procedures 2.3 Output is checked to meet specifications 2.4 Any steps which cause a problem are noted and changes recommended to problematic steps
3. Improve work health and safety (WHS)	3.1 Hazards in all steps/actions are identified 3.2 Risks from each hazard are determined 3.3 Actions which may be performed in a more ergonomic manner are identified 3.4 Changes are recommended to improve WHS

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1	Recognises text within job specifications and follows written instructions
Writing	2.4, 3.1, 3.4	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	1.4, 3.4	Clearly articulates requirements using language appropriate to audience and environment
Numeracy	1.1	Uses simple mathematical calculations to determine timeframes
Navigate the world of work	2.2, 3.1-3.4	Takes personal responsibility for adherence to enterprise policies, procedures and standards
Get the work done	1.1-1.3, 2.1, 2.3, 2.4, 3.1-3.3	- Takes responsibility for planning and organising own workload, necessary resources and workplace scheduling - Recognises and takes responsibility for addressing predictable and some less predictable problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP357 Apply quick changeover procedures	ICPSU357C Apply quick changeover procedures	Updated to meet Standards for Training Packages	Equivalent qualification

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP357 Apply quick changeover procedures

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- plan a changeover including scheduling, organising tools, parts and materials, and liaising with required people
- complete a changeover according to quick changeover procedures
- identify hazards during all steps of changeover, determine risks, and recommend changes to improve health and safety.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain principles of a quick changeover
- identify relevant procedures
- explain purposes/requirements of changeover
- describe how to recommend WHS or changeover improvements
- explain how to check that output meets quality requirements
- outline the process for minimisation of changeover scrap
- summarise work health and safety (WHS) requirements for completing changeovers.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to machinery for changeover.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP362 Communicate as part of a work team

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to communicate as part of a work team.

It applies to individuals who perform a range of defined tasks relating to the printing and graphic arts industry, and who may also provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Participate in group discussions	1.1 Participant's contribution in a small group discussion to reach agreement on a workplace related issue is clearly evident 1.2 Personal views are presented in a way that supports views of others involved in the discussion 1.3 Appropriate meeting procedures are adhered to 1.4 Information is conveyed in a logical, clear and concise manner 1.5 Follow-up steps are taken as specified

ELEMENT	PERFORMANCE CRITERIA
2. Prepare a presentation	2.1 Planning and preparation of a simple presentation is undertaken cooperatively with team members 2.2 Agreed tasks are completed to schedule 2.3 Participant's purpose in the presentation is clearly evident from the context 2.4 Participant's interaction is supportive and constructive
3. Present a job related report to a group	3.1 Views are presented clearly and logically and relate to the aims of the presentation 3.2 Stated purpose of the presentation is achieved

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 2.1	Recognises relevant information within workplace documents
Writing	2.1	Uses clear, specific and industry related terminology to plan and prepare workplace documents
Oral Communication	1.4, 3.1	Provides information using language, tone and vocabulary appropriate to audience and environment
Navigate the world of work	1.3, 1.5, 2.3, 3.2	- Understands and adheres to workplace procedures - Understands nature and responsibilities of own role and how the role contributes to the work of others in the immediate work context
Interact with others	1.1, 1.2, 2.1, 2.4	- Plays an active role in workgroup discussions, paying some attention to perspectives of others - Cooperates with others as part of familiar routine activities and contributes to specific activities requiring joint responsibility and accountability - Begins to recognise and accommodate individual differences
Get the work done	2.1, 2.2	Takes responsibility for planning, organising and implementing tasks required to achieve required outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP362 Communicate as part of a work team	ICPSU362C Communicate as part of a work team	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP362 Communicate as part of a work team

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- actively participate in a work group discussion by :
 - providing information and personal views clearly, logically and concisely
 - adhering to meeting procedures
 - completing required follow up after the discussion
- plan and prepare a simple presentation with other team members
- deliver a clear and logical presentation to a group that meets the purpose of the presentation.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the importance of listening effectively, speaking clearly and taking concise notes
- outline how to gather and organise information for a discussion or presentation
- summarise the relevant procedures for conducting and participating in a meeting
- describe how to set goals in a group environment
- summarise how to negotiate outcomes within a group environment
- explain how to handle conflict in a group environment
- outline the key presentation techniques
- summarise the presentation tools and media available

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP381 Operate and maintain computer resources

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake basic computing skills including routine personal computer maintenance, upgrades, restorations, data storage, conversion and transmission.

It applies to individuals who perform a range of defined tasks relating to the printing and graphic arts industry, and who may also provide some leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Perform routine system maintenance	1.1 Required equipment is checked, and is in working order and available for use 1.2 Peripherals are fitted, maintained, cleaned and adjusted as required 1.3 Personal computer furniture and fittings are adjusted according to work health and safety (WHS) practices and protection of equipment considerations

ELEMENT	PERFORMANCE CRITERIA
	1.4 Routine system maintenance and security processes are performed 1.5 Correct functioning of automated processes is monitored 1.6 Monitors are adjusted only when being calibrated and are otherwise left alone 1.7 All abnormalities and system malfunctions are reported 1.8 Off-line maintenance records are kept up-to-date
2. Perform back-ups and restorations on a personal computer	2.1 File system back-ups are performed regularly according to established workplace practices 2.2 Back-up media are labelled, stored and rotated according to established workplace practices 2.3 Files are restored from back-up as required 2.4 Data is recovered from damaged and corrupted files using small office tools 2.5 Adequate written records of back-ups are kept
3. Store and supply consumables	3.1 Consumables are stored and disposed of according to WHS, care of equipment and system security 3.2 Stock levels and user needs are monitored to ensure required consumables are available
4. Upgrade and configure a personal computer	4.1 Software and peripherals are installed, upgraded and configured according to enterprise policy 4.2 New software, upgrades and adjustments are tested to ensure adequate performance 4.3 Personal computer furniture and fittings are adjusted to meet workplace standards for WHS and care of equipment 4.4 Written records of installations, upgrades and configurations are maintained
5 Access documentation, records and updates	5.1 Documentation, including hardware and software manuals and equipment inventory and service records, is stored and accessed appropriately 5.2 Supplementary product information, updates and technical reference material are accessed using the internet, journals and other sources
6. Access and deliver data	6.1 Removable storage devices are connected, disconnected and configured as required

ELEMENT	PERFORMANCE CRITERIA
	6.2 Data is accessed from different types of file systems 6.3 Data is stored and converted to suit a variety of operating systems, environments and applications 6.4 Data is transmitted effectively by the method most appropriate to the task

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	4.2, 5.1, 5.2, 6.1-6.4	Recognises text within job specifications and follows written instructions
Writing	1.8, 2.2, 2.5, 4.4	Uses clear, specific and industry related terminology to complete and update workplace documentation
Navigate the world of work	1.3, 2.1, 3.1, 4.3	Recognises and follows organisational and legislative requirements associated with own role
Interact with others	1.7	Uses appropriate communication protocols and conventions to report issues
Get the work done	1.1, 1.2, 1.4-1.8, 2.1-2.5, 3.1, 3.2, 4.1, 4.2, 4.4, 5.1, 5.2, 6.1-6.4	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Understands purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks, adapting some functions to improve personal efficiency - Initiates standard procedures when responding to familiar problems within immediate context - Takes responsibility for outcomes of routine decisions related directly related to own role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP381 Operate and maintain computer resources	ICPSU381 Operate and maintain computer resources	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP381 Operate and maintain computer resources

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly operate and maintain computer resources
- produce log books and written records showing system maintenance and configuration history over a period of THREE months, including all reported abnormalities and how they were addressed
- perform a routine system back-up and restore a nominated file from an earlier back-up
- convert a document from one common file format to another and make the file available for access on a different platform (eg Macintosh application to MS-Windows application via suitably encoded Internet email attachment)
- research and report availability of upgrades and support for TWO pieces of hardware and TWO pieces of software currently in use.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Work health and safety (WHS) requirements for terminal operators

- describe correct positioning of the keyboard, mouse and screen to avoid fatigue
- explain when a foot rest is appropriate

Computing technology

- describe relationships between baud rate, bits per second and bandwidth
- explain the meaning of MIPPS
- describe the function of the video card
- specify what must be checked before commencement of a software installation or upgrade

Security and storage of data

- identify risks that might exist for the system, the enterprise and users if an individual proceeds to install their own software (assuming the software has been scanned for viruses)
- describe back-up and restoration procedures currently used, as well as their strengths and weaknesses
- explain why hand-written records are kept
- describe how to identify and respond to a possible security breach or virus attack
- list environmental factors that could cause data loss from removable media

File preparation, conversion and encoding including cross-platform considerations

- describe how to retain fonts of converted files
- explain differences in file naming conventions between IBM-PC, Macintosh and Unix
- list three encoding methods for internet email transmission of files and state which platform each is used for
- list four common graphics file formats and when each format should be chosen

Correct use of network and telecommunications technologies

- explain how a Macintosh can communicate with another computer
- identify types of cabling and network cards installed and their effect on data transmission speed
- summarise how to transmit data
- describe how to conduct a search for product information on the internet
- identify the most efficient way to exchange files with clients or other companies

Specific hardware, peripherals and consumables for the pre-press area

- list the configuration of a typical high performance pre-press computer
- identify the form of computer language used to drive an image setter
- describe types of removable media commonly used in the pre-press area
- list pieces of hardware that require periodical cleaning

Pre-press software

- specify the limiting factor of most desktop publishing pre-press software
- explain where a multitasking computer operating system fits in the pre-press production process
- identify appropriate software to:
 - scan for a virus
 - produce a logo
 - manipulate an image
 - set up a printer network
 - create a page of text

Information sources

- list the machine manuals, safety and other documentation relevant to this task and outline the information included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP389 Undertake basic root cause analysis

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to contribute to an advanced maintenance strategy.

It applies to individuals who work in an organisation and apply competitive manufacturing strategies. This involves taking responsibility for their work processes, undertaking basic root cause analysis of problems and generally contributing to overall equipment efficiency (OEE).

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Recognise problem	1.1 Equipment/plant condition is monitored according to enterprise procedures 1.2 Product is monitored against quality standards and job specifications 1.3 Conditions/product characteristics indicative of a problem are identified 1.4 Existing work-based problem and/or practice is recognised
2. Implement quick fix	2.1 Immediate problem is controlled/contained

ELEMENT	PERFORMANCE CRITERIA
	2.2 Quick fix is recommended within scope of competency and authority
3. Determine root cause	3.1 Range of possible causes are identified 3.2 Information is gathered to eliminate/confirm causes 3.3 Assistance is sought as required according to level of responsibility and personal capabilities 3.4 Root cause is identified based on examination of the above
4. Develop permanent solution	4.1 Range of methods of eliminating root cause/breaking the cause tree is identified 4.2 Most appropriate solution is selected based on machinery capabilities, material requirements and job schedules 4.3 Relevant people are liaised with to confirm decision, if required 4.4 Solution is recommend/implemented within limits of competency and authority 4.5 Implementation is monitored and improvements are made as required

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 3.2, 4.2	Recognises relevant text within job specifications and organisational procedures and follows written instructions
Writing	2.2, 4.1, 4.4	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	2.2, 3.3, 4.3, 4.4	Participates in verbal interactions using language, tone and vocabulary appropriate to audience and environment
Navigate the world of work	1.1, 1.2, 2.2, 3.3, 4.4	- Adheres to enterprise policies procedures and standards - Understands nature and purpose of own role and associated responsibilities and how it contributes to the

		work of others in immediate work context Seeks advice about procedures and expectations when taking on new tasks or roles
Interact with others	2.2, 3.3, 4.3, 4.4	Collaborates and cooperates with others to achieve joint outcomes
Get the work done	1.1, 1.3, 1.4, 2.1, 2.2, 3.1, 3.2, 3.4, 4.1, 4.2, 4.5	- Takes responsibility for planning, organising, implementing and monitoring tasks required to achieve required outcomes - Uses common digital systems to analyse data - Initiates standard procedures when responding to problems within immediate context - Reviews outcomes of decisions to identify opportunities for improvement

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP389 Undertake basic root cause analysis	ICPSU389C Undertake basic root cause analysis	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP389 Undertake basic root cause analysis

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- recognise problems and undertake a root cause analysis (RCA), either alone or with assistance, and propose permanent solutions.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain use of communication, documentation and problem solving techniques
- summarise RCA methodology
- outline indicators of a problem
- identify principles of the process sufficient to undertake a RCA and propose solutions
- explain what a 'quick fix' means
- outline an analysis in conjunction with relevant analysis tools (cause/effect diagrams, Pareto Charts, 4W).

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to:

- RCA via simulation or an actual project
- an organisation using RCA.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP417 Perform laboratory quality tests of materials and finished product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to quality-test materials and printed products in a laboratory.

It applies to individuals who perform a broad range of skilled tasks relating to the printing and graphic arts industry, and may also provide some leadership and guidance to others in the application and planning of the skills.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare laboratory equipment	1.1 Appropriate equipment is selected and prepared 1.2 Equipment is checked for calibration where necessary
2. Test raw materials or finished goods	2.1 Raw material or finished goods specification is identified and test procedure established to determine test parameters 2.2 Raw material or finished goods are tested against specified quality standards using appropriate/prescribed testing procedures

ELEMENT	PERFORMANCE CRITERIA
	and adhering to Work Health and Safety (WHS) requirements
3. Record and report test result	3.1 Recording and reporting of test results are completed according to enterprise requirements 3.2 Problems and issues are documented and reported to appropriate personnel
4. Clean laboratory equipment	4.1 Equipment is cleaned and stored according to enterprise requirements 4.2 Chemicals and waste are disposed of according to enterprise procedures and WHS standards

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 2.2, 3.1, 4.2	Recognises text within job specifications and follows written instructions
Writing	3.1, 3.2	Uses clear, specific and industry related terminology to complete and update workplace documentation
Numeracy	1.2	Uses mathematical calculations to calibrate equipment
Navigate the world of work	2.3, 3.1, 4.1, 4.2	Takes personal responsibility for following enterprise policies procedures, standards and legislative requirements
Interact with others	3.1, 3.2	Uses appropriate communication protocols and conventions to report issues
Get the work done	1.1, 1.2, 2.2, 3.2, 4.1	- Takes responsibility for planning, organising and implementing tasks according to enterprise requirements - Understands purposes and features of common digital systems and tools, and operates them effectively to complete routine tasks - Initiates standard procedures when responding to familiar problems within immediate context

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP417 Perform laboratory quality tests of materials and finished product	ICPSU417C Perform laboratory quality tests of materials and finished product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP417 Perform laboratory quality tests of materials and finished product

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- correctly perform laboratory tests for quality of materials and products
- correctly dispose of chemicals and waste according to enterprise procedures and work health and safety (WHS) standards
- produce a portfolio of documents showing tests carried out over a period of at least ONE month, including documentation of test results and reported problems.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

WHS and other statutory requirements

- identify WHS concerns relating to testing equipment
- identify statutory requirements that must be met regarding use of this equipment

Testing equipment

- explain the need to work in a controlled, clean environment
- list relevant testing equipment and why they are used
- describe how the equipment is calibrated

Printing processes

- describe some common tests required for various printing operations and products in this company
- list common causes of failure in products tested personally
- describe the test performed on this product and why

Sampling and quality control techniques

- list sampling techniques used to select products for testing
- explain how to determine appropriate size of samples for testing

Record keeping

- describe the type of records that need to be kept on a particular test product
- explain the purpose of keeping test results
- explain how test results can be used in the future

Equipment maintenance

- explain the need to keep equipment clean
- describe how test equipment should be stored
- list chemicals used to clean the equipment

Information sources

- list the machine manuals, safety and other documentation relevant to this task and outline the information included in these documents.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access laboratory testing equipment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP455 Supervise and schedule work of others

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to supervise and schedule work of a team or individuals.

It applies to individuals who perform a broad range of skilled tasks relating to the printing and graphic arts industry, and who may also provide some leadership and guidance to others in application and planning of the skills.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan and implement work schedules	1.1 Tasks and/or jobs are identified and prioritised according to overall production schedule 1.2 Timelines, personnel and equipment are identified for each job and task 1.3 Schedules are communicated logically and in an easily understood manner 1.4 Changes to schedules are implemented through reorganisation of priorities, with reasons being clearly conveyed to the team or

ELEMENT	PERFORMANCE CRITERIA
	individuals 1.5 Priority of tasks is communicated to the team or individuals
2. Monitor performance of tasks	2.1 Required standard is effectively communicated to the team or individuals to ensure understanding of allotted task 2.2 Instruction or support to achieve required standard is provided as necessary 2.3 Standard of performance is monitored, including quality standards, to ensure achievement of outcomes, and is reported according to enterprise procedures 2.4 Completion times of tasks/jobs are monitored and scheduling is adjusted as appropriate
3. Monitor and support development of teams or individuals	3.1 Team or worker performance is monitored to determine effectiveness and is reported according to enterprise procedures 3.2 Support is provided to individuals or teams to ensure full participation 3.3 Procedures are provided to assist interaction and feedback on effectiveness between teams and individuals
4. Monitor application of WHS in the work area	4.1 Implementation of standards, both work health and safety (WHS) and environmental, is monitored to determine safety in the work area requirements 4.2 Strategies for prevention or correction of problems are determined from the monitoring process 4.3 Recommendations for prevention or correction are made to achieve established standards
5. Communicate with management, work teams and individuals	5.1 All information affecting work is explained logically and in an easily understood manner to team coordinators, teams or individuals where appropriate 5.2 Effective and appropriate information provision is carried out with management and/or external personnel 5.3 Written reports are concise and conform to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.4, 2.4, 3.1, 3.3, 4.1	Recognises relevant text within organisational documents and follows written instructions
Writing	1.1, 1.4, 2.3, 2.4, 3.1, 3.3, 4.3, 5.1-5.3	Records numerical and textual information related to outcomes of the job
Oral Communication	1.3-1.5, 2.1, 2.2, 3.2, 3.3, 4.3, 5.1-5.3	Provides explanations using vocabulary and non-verbal features appropriate for audience and context
Numeracy	1.2-1.4, 2.4	Uses simple mathematical calculations related to timeframes and schedules
Navigate the world of work	2.3, 3.1, 4.1, 5.3	Recognises and follows organisational and legislative requirements associated with own role
Interact with others	1.3-1.5, 2.1, 2.2, 3.2, 3.3, 4.3, 5.1-5.3	- Uses appropriate communication protocols and conventions to convey information to co-workers - Plays a lead role in collaborating, consulting and cooperating with co-workers to achieve shared understanding of individual roles and group objectives
Get the work done	1.1, 1.2, 2.3, 2.4, 4.2	- Takes responsibility for planning and organising own workload and workloads of others - Initiates standard procedures when responding to familiar problems within immediate context

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP455 Supervise and schedule work of others	ICPSU455C Supervise and schedule work of others	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP455 Supervise and schedule work of others

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- effectively schedule and supervise a team or individuals
 - create a portfolio of documents showing:
 - planning, implementing and monitoring schedules
 - monitoring and reporting on the performance of others
 - providing support and feedback on performance to others
 - determining safety requirements in the work area
 - monitoring work health and safety and environmental standards. (Suitable documents for the portfolio include rosters, schedules, quality-related documentation and testimonials from superiors and workers being supervised.)

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

WHS standards

- explain who is responsible for work health and safety (WHS) standards in the workplace
- explain reporting procedures for WHS incidents

Planning and implementing work schedules

- explain how priority of jobs is determined
- describe work scheduling procedures used within the organisation
- explain why changes to scheduling might be needed

Standards monitoring

- outline information reported in performance monitoring

- identify who is responsible for providing instruction to achieve the required standard

Staff and workforce development

- describe how often teams or individuals should be monitored on performance
- outline changes that can be made to enhance individual performance
- outline changes that can be made to enhance team performance
- list advantages of providing written reports to management.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP456 Control production

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manage production of a shift or section.

It applies to individuals who perform a broad range of skilled tasks relating to the printing and graphic arts industry, and who may also provide some leadership and guidance to others in the application and planning of the skills.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify requirements for efficient production	1.1 Machine operations, staff and production processes are organised to meet production requirements 1.2 Recommendations are made related to requirements and according to enterprise procedures, work health and safety (WHS) and Environmental Protection Agency (EPA) requirements 1.3 Quality standards and safe work practices are checked to ensure compliance with enterprise procedures and legislative requirements

ELEMENT	PERFORMANCE CRITERIA
2. Monitor production efficiency	2.1 Compliance to specified requirements (including quality standards, time taken, wastage) is checked to ensure efficiency is maintained 2.2 Non-compliance is identified, reported or recorded and investigated to determine causes
3. Implement improvements to production efficiency	3.1 Corrective or preventive action is recommended and implemented where appropriate 3.2 Changes are communicated to relevant personnel in a logical and easily understood manner 3.3 Changes are monitored to confirm improvement to production efficiency

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 2.2, 3.1, 3.3	Recognises text within job specifications and follows written instructions
Writing	1.2, 2.2, 3.1, 3.2	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	3.2	Provides explanations using language, tone and vocabulary appropriate to audience and environment
Navigate the world of work	1.2, 1.3	- Takes personal responsibility for compliance with enterprise policies, procedures and standards - Appreciates implications of legal and regulatory responsibilities related to own work with specific reference to safety and environmental concerns
Interact with others	1.2, 2.2, 3.1	Uses appropriate communication protocols and conventions to report recommendations
Get the work done	1.1, 2.1, 2.2, 3.1, 3.3	- Takes responsibility for planning and organising own workload, identifying ways to achieve efficiencies - Initiates standard procedures when responding to familiar problems within immediate context - Takes responsibility for outcomes of routine decisions

		related directly to own role • Evaluates effectiveness of decisions in terms of how well they meet stated goals

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP456 Control production	ICPSU456C Control production	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP456 Control production

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- effectively manage a shift or sections production
- create a portfolio of documents showing how:
 - machine operations, staff and production processes are organised
 - quality standards and safe work practices are checked for compliance with procedures and legislative requirements
 - production is monitored for compliance
 - production improvement are identified, recorded, reported and implemented.
(Suitable documents for the portfolio include production summaries, quality-related documentation and testimonials from superiors and workers being supervised.)

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Requirements for efficient production standards

- describe the work health and safety requirements for production control
- explain how the production process information is obtained
- outline quality standards to check to ensure enterprise procedures are met
- outline quality standards to check to ensure environmental protection requirements are met
- identify monitoring systems available to aid production management

Maintaining production efficiency

- identify problems that could cause non-compliance of production efficiency and how they can occur

- describe what information is necessary to efficiently plan, schedule and reschedule production

Improving production efficiency

- identify who has authority to implement production changes
- describe the information that needs to be communicated to implement changes to production control.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP458 Monitor production workflow

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to monitor production workflow, assess job steps and evaluate work progress.

It applies to individuals who perform a broad range of skilled tasks relating to the printing and graphic arts industry, and who may also provide some leadership and guidance to others in the application and planning of the skills.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPSUP216	Inspect quality against required standards

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Input job	1.1 Each new job is assigned a unique identification number 1.2 Baselines are set for production and budget estimation

ELEMENT	PERFORMANCE CRITERIA
	1.3 Number of actions or steps are identified for each job 1.4 Nature of actions are identified
2. Assess job step	2.1 Job step is identified using business workflow tools 2.2 Current step is compared against any baselines set for the job 2.3 Number of steps and iterations are identified and any corrective action undertaken if necessary 2.4 Actions within each step are logical to the step 2.5 Resources required for current and future steps are identified, and availability confirmed
3. Evaluate job progress	3.1 Job progress is evaluated and any improvement modifications to the workflow are identified 3.2 Parallel activities are fully utilised to meet baselines and quality standards 3.3 Reports are reviewed and possible process improvements identified

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.1, 2.3, 3.3	- Recognises text within job specifications and follows written instructions - Reviews documents to identify specific text
Writing	2.5, 3.1, 3.3	Produces documents using layout that meets audience needs and text purpose
Numeracy	1.1, 1.2	Uses simple mathematical calculations within budget constraints, and arranges numerical information sequentially
Get the work done	1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Initiates standard procedures when responding to familiar problems within immediate context - Reviews outcomes of decisions to identify opportunities

		for improvement

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP458 Monitor production workflow	ICPSU458C Monitor production workflow	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP458 Monitor production workflow

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- assign job identifier and set up baselines for production and budget estimation
- identify job steps, actions and resource requirements
- evaluate job progress against baselines and quality standards and report on possible improvements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain what baselines are and how they are set
- summarise the production workflow
- explain how to conduct a job assessment
- summarise techniques used for scheduling and resource allocation.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to relevant hardware and software or non-computerised systems.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP464 Provide customer service and education

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to liaise with customers and clients to ensure satisfactory provision of printed products or services.

It applies to individuals who perform a broad range of skilled tasks and services for customers in the printing and graphic arts industry. They may also provide some leadership and guidance to others in the application and planning of the skills.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Establish and maintain a positive client relationship	1.1 Rapport with client is built and maintained according to accepted business practices 1.2 Opportunities to provide additional services to client are identified 1.3 Client is advised of input requirements and restraints for relevant printing processes
2. Manage customer	2.1 Internal and external customer needs and expectations are

ELEMENT	PERFORMANCE CRITERIA
expectations	matched with production process requirements 2.2 Job requirements are clarified with client and compared with quote/estimate 2.3 Information and clarifications are passed between client and technical staff 2.4 Job specifications and job parameters are used to define appropriate production procedures and processes 2.5 Knowledge of company services, equipment capabilities, limitations and workflow is demonstrated 2.6 Project is evaluated and feedback provided to client as agreed, or according to enterprise customer service practices 2.7 Preliminary proof and contract proof are distinguished according to enterprise standards, and communicated to client 2.8 Client is provided with documentation to review and approves all dummies and proofs at appropriate stages in production process 2.9 Job information (eg work orders, quotes, job tickets) is documented and compiled
3. Manage project budget and timeline	3.1 Client requested changes are monitored and documented and impact on budget and timeline is communicated to client 3.2 Client is advised on alternative production techniques

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.2, 2.4, 2.6, 2.8, 2.9, 3.1	- Recognises text within job specifications and follows written instructions - Reviews documentation to identify scheduling changes
Writing	1.3, 2.2, 2.6, 2.7, 2.9, 3.1	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	1.1, 1.3, 2.2, 2.3, 2.6, 2.7, 3.1, 3.2	- Clearly explains requirements using language appropriate to audience and environment - Participates in a verbal exchange of ideas and solutions

Numeracy	2.2, 3.1	Uses mathematical formulas and calculations to operate within budgetary constraints
Navigate the world of work	1.2, 2.5-2.7	- Regularly reviews current situation and work options, developing strategies to address possible opportunities - Adheres to organisational policies and practices
Interact with others	1.1, 2.3, 2.8	- Recognises importance of building rapport to establish effective working relationships - Selects appropriate form, channel and mode of communication for a specific purpose relevant to own role
Get the work done	2.1, 2.5, 2.6, 2.9	Develops plans to manage relatively complex, non-routine tasks with an awareness of how they may contribute to longer term operational and strategic goals

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP464 Provide customer service and education	ICPSU464C Provide customer service and education	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP464 Provide customer service and education

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use effective strategies to build client relationships, according to business practices
- liaise with customers and staff to gather, clarify, convey or confirm information
- explain the services and capabilities of the enterprise to customers
- effectively manage customer expectations and make client aware of timelines and budget
- prepare and document required job information
- assemble a portfolio covering a period of at least ONE month that demonstrates satisfactory completion of a job (documents should indicate that the job has been completed within budget and to the customer's satisfaction).

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline requirements of all relevant printing processes
- explain the relationship between pre-press, press and post-press
- outline costs and characteristics of a range of substrates and inks

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP482 Troubleshoot and optimise materials and machinery

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to experiment with and extend the use of materials, and undertake non-routine adjustment and tuning of machinery to meet efficiency targets.

It applies to individuals who perform a broad range of skilled tasks and services to customers in the printing and graphic arts industry. They may also provide some leadership and guidance to others in the application and planning of the skills.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Review material behaviour	1.1 Evaluation of material or product structure is conducted to identify options for production 1.2 Material handling options are chosen to ensure best performance of materials during production 1.3 Options are assessed to determine most effective/efficient method of production, ensuring highest quality and yield from materials

ELEMENT	PERFORMANCE CRITERIA
	1.4 Test run confirms correct options, or the need for further adjustment or trialling to meet quality standards 1.5 Options and recommendations are documented for future reference according to enterprise procedures
2. Tune and adjust machinery	2.1 Idiosyncrasies of machines are reviewed and adjustments or tuning undertaken to compensate or exploit the idiosyncrasy, within the manufacturer's specifications 2.2 Options are assessed to determine most effective/efficient method of production, ensuring highest quality and yield from machinery 2.3 Test run confirms correct options and settings, or the need for further adjustment or tuning to meet quality standards 2.4 Options and recommendations are documented for future reference according to enterprise procedures 2.5 Instruction is provided to machine operator or finisher on new practices, if required
3. Troubleshoot machinery and material problems	3.1 Corrective or preventive action is recommended and implemented where appropriate 3.2 Changes are communicated to relevant personnel in a logical and easily understood manner 3.3 Changes are monitored to confirm improvement to production efficiency 3.4 Ongoing problems are reported according to enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.1, 2.4	Recognises text within job specifications and organisational documentation and follows written instructions
Writing	1.5, 2.4, 2.5, 3.1, 3.2, 3.4	Uses clear, specific and industry related terminology to complete and update workplace documentation

Oral Communication	2.5, 3.2	Clearly explains requirements using language appropriate to audience and environment
Numeracy	1.3, 1.4, 2.2, 2.3	Uses mathematical calculations to confirm equipment settings and adjustments
Navigate the world of work	1.5, 2.4, 3.4	Follows organisational procedures and considers own role in terms of its contribution to broader goals of the work environment
Interact with others	3.4	Uses appropriate communication protocols and conventions to report issues
Get the work done	1.1-1.4, 2.1-2.3, 3.1, 3.3	- Develops plans to manage relatively complex, non-routine tasks with an awareness of how they contribute to organisational goals - Uses systematic, analytical processes to solve problems; setting goals, gathering relevant information and identifying and evaluating options against agreed criteria - Utilises features of digital tools or systems to improve productivity

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP482 Troubleshoot and optimise materials and machinery	ICPSU482C Troubleshoot and optimise materials and machinery	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP482 Troubleshoot and optimise materials and machinery

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- recommend and implement new practices that extend every day use of materials and machinery, and troubleshoot problems with material and machinery
- produce a portfolio that demonstrates each element has been carried out (including records of standards and monitoring procedures, and evidence they are being effectively carried out)
- confirm production efficiencies through discussions with senior management and review of workplace documentation.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Examine design and identification of materials and suitable processes

- explain need to implement change
- identify required changes to existing production areas
- explain how the operation can be integrated into existing organisational processes
- identify materials required in addition to existing ones
- outline alternatives to the chosen process
- explain the decision for choosing a particular process

Review customer and production requirements

- explain the review conducted, to assess the process for suitability for customer requirements
- list different materials that can be used to produce the same results without production problems

- identify production plan information to aid in determining the process

Review existing operations and problems

- describe the impact the process will have on existing operations
- explain how training can be integrated into existing process operations
- describe how the process can eliminate existing production problems

Identify operations and machinery

- explain how to optimise existing machinery or equipment
- describe special provisions that will be necessary to extend the use of equipment
- calculate the expected production life of this equipment and machinery
- identify technology that could see this equipment outdated
- identify technology that could improve this equipment or machinery
- summarise work health and safety considerations for operating machinery.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to machinery and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP485 Implement a Just-in-Time system

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to facilitate the implementation and operation of a Just-In-Time (JIT), or Kanban, system in the organisation.

It applies to individuals who perform a broad range of skilled tasks and services to customers in the printing and graphic arts industry. They may also provide some leadership and guidance to others in the application and planning of the skills.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Monitor operation of JIT system	1.1 Track value of key measures 1.2 Recognise indicators of poor performance 1.3 Take appropriate quick fix action
2. Liaise with relevant stakeholders	2.1 Regularly communicate with team members regarding operation of the JIT system 2.2 Communicate with relevant personnel up and down the value chain regarding operation of the JIT system

ELEMENT	PERFORMANCE CRITERIA
	2.3 Identify issues with stakeholders and take appropriate quick fix action
3. Improve JIT system	3.1 Identify areas requiring improvement in the JIT system 3.2 Recognise competency gaps of team members and other stakeholders 3.3 Recognise attitudinal issues of team members and other stakeholders 3.4 Develop appropriate improvement solutions 3.5 Liaise with relevant people regarding these solutions 3.6 Implement/assist with implementation of the solutions

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2	Recognises text in organisational documents related to outcomes of the job
Writing	2.1, 2.2, 3.4	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	2.1-2.3, 3.5	- Provides clear explanations using language appropriate to audience and environment - Participates in verbal exchanges of ideas and solutions
Numeracy	1.1, 1.2, 3.1	Uses mathematical calculations to track value of key measures and monitor operation of the JIT system
Interact with others	3.3, 3.5	- Recognises that attitudinal issues can affect implementation and uses strategies to address individual concerns - Collaborates with others to achieve shared outcomes
Get the work done	1.1, 1.3, 2.3, 3.1, 3.2, 3.4, 3.6	- Develops plans to manage relatively complex, non-routine tasks with an awareness of how they contribute to organisational goals - Uses systematic, analytical processes to solve problems, setting goals, gathering relevant information and identifying and evaluating options to arrive at solutions

		• Utilises digital systems and tools to monitor operations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP485 Implement a Just-in-Time system	ICPSU485C Implement a Just-in-Time (JIT) system	Updated to meet Standards for Training Packages Title change	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP485 Implement a Just-in-Time system

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- facilitate smooth operation of a just-in-time (JIT) system in a specific area across an extended period of time
- make recommendations to improve a JIT system.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise negotiation techniques
- explain JIT principles relevant to job(s)
- outline procedures for making/recommending improvements
- identify reasons for delays/storages/inventories in that section of the value chain under their control and methods to reduce/eliminate them
- explain competency gap analysis and methods of filling competency gaps
- describe principles of the manufacturing process relevant to the section/team
- outline production data generated by the process, and its application to JIT.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to an organisation using JIT.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP486 Mistake proof a production process

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to focus on preventing errors/backsliding to a previous behaviour.

It applies to individuals who perform a broad range of skilled tasks and services to customers in the printing and graphic arts industry. They may also provide some leadership and guidance to others in the application and planning of the skills

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Analyse the process	1.1 Identify sources of variability/non-conformance in the process 1.2 Identify critical control points in the process 1.3 Analyse causes of variability/non-conformance
2. Develop preventive techniques/systems	2.1 Liaise with team members and others to develop mistake-proof methods of performing operations 2.2 Test and validate mistake proofing

ELEMENT	PERFORMANCE CRITERIA
3. Implement permanent fix	3.1 Liaise with relevant people to have systems/procedures changed to implement solution 3.2 Liaise with relevant people to ensure the workforce has an appropriate skills set 3.3 Follow through to ensure implementation occurs
4. Monitor implementation	4.1 Critically observe implementation 4.2 Compare results of the implementation against expected outcomes 4.3 Modify solution to improve outcomes 4.4 Ensure procedures reflect change 4.5 Ensure training and assessment reflect change 4.6 Audit change at agreed period/cycle 4.7 Take action on any observed deviation
5. Seek improvements	5.1 Observe changes against enterprise expectations for production 5.2 Analyse process against enterprise expectations for production

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Reading	2.2, 3.1, 4.4-4.6, 5.2	Recognises text within job specifications and work processes related to outcomes of the job
Writing	2.1, 2.2, 3.1, 3.2, 4.3-4.7, 5.2	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	2.1, 3.1, 3.2	- Provides clear explanations using language appropriate to audience and environment - Participates in a verbal exchange of ideas and solutions
Navigate the world of work	5.1, 5.2	Understands and adheres to enterprise policies and procedures
Interact with others	2.1, 3.1, 3.2	Collaborates with others to achieve joint outcomes
Get the work done	1.1-1.3, 2.2, 3.1, 3.4, 4.1-4.3, 4.5, 4.6, 4.7,	Develops and implements plans to manage relatively complex, non-routine tasks with an awareness of how

	5.1, 5.2	they contribute to enterprise goals • Uses systematic, analytical processes to solve problems; setting goals, gathering relevant information and identifying and evaluating options to reach solutions • Utilises digital systems to monitor processes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP486 Mistake proof a production process	ICPSU486C Mistake proof a production process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP486 Mistake proof a production process

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- analyse ONE complex process or several simpler processes and implement systems to ensure processes are as error-proof as possible
- monitor and evaluate the results of the modifications to the process(es).

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the concept of 'mistake proofing'
- explain the importance of communication, problem-solving and teamwork in developing and implementing improvements
- identify factors in production processes which may cause variability
- outline methods of controlling variability in production processes
- discuss mistake-proofing methods relevant to the process/product
- outline methods used to monitor performance.
-

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to an organisation using a competitive manufacturing approach.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP487 Analyse manual handling processes

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to analyse manual handling in terms of its efficiency and safety.

It applies to individuals working as team leaders or senior team members who are required to examine the manual handling component of a job and improve it in terms of safety, effort required and efficiency.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Assess manual handling risks	1.1 Identify manual handling hazards in work area 1.2 Assess risks arising from those hazards
2. Analyse physical effort requirements of job	2.1 Determine basic manual handling requirements of job 2.2 Analyse requirements in terms of components such as lift, move, place and hold 2.3 Analyse items to be handled in terms of weight, size, shape or other hazards

ELEMENT	PERFORMANCE CRITERIA
3. Determine time/effort components of physical effort	3.1 Break required movement pattern down into movement components 3.2 Determine time and effort requirements of movements 3.3 Develop alternative movement patterns 3.4 Determine time and effort requirements of alternative movements 3.5 Determine handling aids required to assist movement 3.6 Determine preferred movement pattern(s)
4. Analyse ergonomics of physical effort	4.1 Analyse ergonomics of the preferred movement pattern 4.2 Develop substitute movements for any movement which is ergonomically unsound 4.3 Determine handling aids required to improve ergonomics of required movements
5. Optimise application of physical effort	5.1 Select movement patterns which are ergonomically sound and time and effort efficient 5.2 Train all relevant people to use these methods 5.3 Ensure procedures and practices reflect optimum methods

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	5.2	Actively reinforces learning by training others to use safe working practices
Writing	1.2, 2.2, 2.3, 3.2, 3.4, 5.2, 5.3	Uses clear, specific and industry related terminology to record findings, or complete and update workplace documentation
Oral Communication	5.2	- Provides clear explanations using language appropriate to audience and environment - Participates in a verbal exchange of ideas and solutions
Numeracy	2.3, 3.2, 3.4	- Estimates size and weights of objects relevant to manual handling in the workplace - Uses mathematical ideas and techniques to determine

		physical effort
Navigate the world of work	1.1, 2.1	Understands organisational procedures and legislative and regulatory requirements with specific reference to safety
Get the work done	1.1, 1.2, 2.1-2.3, 3.1-3.6, 4.1-4.3, 5.2	- Plans, organises and implements activities required to manage relatively complex, non-routine tasks, with an awareness of their contribution to the whole organisation - Uses systematic, analytical processes to identify and solve problems and make decisions; gathering relevant information, identifying options, and evaluating choices

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP487 Analyse manual handling processes	ICPSU487C Analyse manual handling processes	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP487 Analyse manual handling processes

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- examine the manual handling components of a job and:
 - identify the associated hazards
 - assess the risks
 - determine the time, effort and ergonomic requirements of the current range of movements
 - determine aids or alternative movements that would improve the physical effort
 - implement and document identified improvements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify relevant work health and safety (WHS) legislative requirements that apply to manual handling
- outline principles of efficient movement
- outline principles of efficient job and work method design
- explain principles of work analysis
- outline principles of ergonomics

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to an environment that will allow examination and improvement of physical actions.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP488 Ensure process improvements are sustained

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to ensure gains made by using improved methods, processes and equipment are sustained as the new standard for the team's area of work, and so prevent regression to former practices or digression to less efficient practices.

It applies to individuals who work in an environment where continuous improvement in a manufacturing enterprise is being undertaken.

Improvement initiatives can be made by any number of methods and by teams or individuals. The unit assumes that desired levels of performance or quality are known to the team leader.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Ensure corrective actions are implemented	1.1 Liaise with relevant people 1.2 Negotiate solutions to allow implementation 1.3 Ensure the supply of resources (equipment, modifications, consumables, people)

ELEMENT	PERFORMANCE CRITERIA
	1.4 Ensure workforce has relevant competency levels 1.5 Monitor implementation of corrective action 1.6 Make required adjustments
2. Analyse physical effort requirements of job	2.1 Ensure procedures reflect improvements 2.2 Ensure training and assessment systems reflect improvements 2.3 Liaise with relevant people to ensure their support for the new modified system(s)
3. Determine time/effort components of physical effort	3.1 Determine an appropriate audit period/cycle 3.2 Agree on relevant measures/indicators for the improvement 3.3 Measure performance at agreed time(s), using agreed measures 3.4 Investigate the cause(s) of underperformance 3.5 Take appropriate corrective action to improve performance 3.6 Re-audit the improvement on an agreed basis

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.1, 2.2, 3.1	Interprets workplace documents related to outcomes of the job
Writing	2.1, 2.2, 3.3, 3.6	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	1.1, 1.2, 2.3, 3.2	- Provides clear explanations using language appropriate to audience and environment - Participates in a verbal exchange of ideas and solutions
Numeracy	1.3, 3.1-3.3	- Performs calculations required to ensure adequate resource levels - Uses mathematical processes to develop and measure performance
Interact with others	1.1, 1.2, 2.3, 3.2	Uses collaborative techniques to engage personnel in consultations and negotiations to reach agreeable outcomes

Get the work done	1.2-1.6, 2.2, 3.1, 3.3-3.6	• Develops plans to manage relatively complex, non-routine tasks with an awareness of how they may contribute to longer term operational and strategic goals • Uses systematic, analytical processes to solve problems; setting goals, gathering relevant information and identifying and evaluating options against agreed criteria • Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans • Reviews decisions to identify whether goals were met

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP488 Ensure process improvements are sustained	ICPSU488C Ensure process improvements are sustained	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP488 Ensure process improvements are sustained

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify a process improvement (either from multiple small changes, or from one large change implemented over a period of several months) and:
 - describe the overall process relative to improvements being made
 - arrange all resources required for implementation
 - modify or develop procedures and training systems needed to support successful implementation
 - develop performance measurement tools and use these to measure performance after an agreed period of time
 - investigate causes of underperformance and implement action to improve performance
- document how the process has resulted in sustained improvements in the workplace.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain ways that improvements can be made
- explain the role of procedures and training in improving processes
- identify appropriate methods of measuring performance
- explain how business performance goals are relevant in determining best measures of improved performance.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to:

- an environment in which a process improvement can be implemented and reviewed
- relevant documents, including records and procedures.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP516 Set and apply quality standards

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to set and manage quality procedures within an enterprise or large section/department.

It applies to individuals who perform a broad range of skilled tasks relating to the printing and graphic arts industry, and who may also provide some leadership and guidance to others in the application and planning of the skills.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Set quality standards	1.1 Quality of items is determined according to job specifications and enterprise capacity 1.2 Production proofs are prepared for client approval to determine client's requirements 1.3 Quality standards are determined and inspection specifications set for purpose intended
2. Determine inspection	2.1 Inspection variables are determined in consultation with client,

ELEMENT	PERFORMANCE CRITERIA
specifications	or are set to acceptable workplace standards, and are recorded in job specifications 2.2 Type of inspection is determined according to job specifications
3. Carry out inspection	3.1 Criteria for rejection are determined in consultation with machine operator and inspector/racker and recorded in job specifications 3.2 Variation to standards is monitored and action taken to rectify the problem according to enterprise procedures 3.3 Unsatisfactory work is separated according to pre-determined standards
4. Rework job	4.1 Unacceptable items are evaluated and possible methods of reworking are determined according to workplace quality standards 4.2 Reworking is monitored according to enterprise procedures 4.3 Reworked material/substrates is/are inspected to ensure previously determined requirements are met
5. Evaluate job process	5.1 Production processes are evaluated to determine cause of unacceptable items 5.2 Inspection records are maintained, including number of accepted and rejected items, and cause of rejection 5.3 Records are maintained to ensure faulty processes are identified, recorded and corrected
6. Participate in quality improvement	6.1 Performance is monitored to ensure product or service standards are maintained or improved 6.2 Participation in enterprise quality improvement processes occurs, where applicable

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description

Reading	1.1-1.3, 2.1, 2.2, 3.1, 3.2, 5.2, 5.3, 6.2	Recognises text within job specifications and workplace documents related to outcomes of the job
Writing	1.3, 2.1, 3.1, 3.2, 5.2, 5.3, 6.1, 6.2	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	2.1, 3.1	Participates in a verbal exchange of ideas and solutions
Numeracy	5.2	Uses simple mathematical calculations and arranges numerical information sequentially while maintaining records
Navigate the world of work	3.2, 4.1, 4.2	Monitors adherence to organisational policies, procedures and standards
Interact with others	2.1, 3.1, 6.2	Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective outcomes
Get the work done	1.1, 1.2, 3.2, 3.3, 4.1, 4.3, 5.1, 6.1	- Develops plans to manage relatively complex, non-routine tasks with an awareness of how they may contribute to longer term operational and strategic goals - Uses systematic, analytical processes to solve problems in complex, non-routine situations; setting goals, gathering relevant information and identifying and evaluating options against agreed criteria - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans - Considers purpose, needs and limitations when selecting devices and applications for different tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP516 Set and apply quality standards	ICPSU516C Set and apply quality standards	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP516 Set and apply quality standards

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- Ensure, on TWO occasions, that correct procedures are implemented within an enterprise or large section/department to make sure quality standards are achieved
- produce a portfolio that demonstrates each element has been carried out (including records of standards and monitoring procedures, and evidence they are being effectively carried out).

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Setting quality standards

- describe how criteria for print quality inspections are set
- explain why quality of artwork/film has a bearing on quality of the printed product
- list quality standards set by the customer
- explain how quality standards determine inspection specifications

Determining inspection variables

- describe quality specifications set to make the product acceptable for its intended purpose
- identify who is responsible for inspection specifications
- outline specifications recorded on the job sheet
- describe the specific inspection standards set for printing and finishing

Causes of failure

- list common causes of failure in each production area that need to be monitored
- list procedures implemented to minimise the effect of failure.

Inspection procedures

- explain the criteria for operator inspection (100%, random, periodic or continuous in-line)
- describe the result an unnecessary inspection has on production output
- explain how to determine the minimum number of inspections required to avoid rejects
- outline the information that has to be conveyed for the operator to rectify a problem

Evaluating re-work methods

- identify who is responsible for evaluating the re-work of unacceptable items
- outline the method of re-work determined
- describe the criteria set to monitor the re-work
- list requirements established for the inspection of re-working material to customer's specifications

Determining unacceptable items and evaluating production procedures

- identify the cause of unacceptable items
- describe records kept of acceptable and rejected items
- describe records kept of reasons for rejections
- identify the cause for the rejection and how to rectify the problem

Quality improvements

- explain what information needs to be monitored to maintain standards
- identify who should be involved in monitoring quality standards
- explain how enterprise improvements affect quality standards.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP553 Prepare production costing estimates

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to cost and estimate production processes.

It applies to individuals who perform a broad range of skilled tasks relating to the printing and graphic arts industry, and may also provide leadership and guidance to others in the application and planning of the skills.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify costing estimate requirements	1.1 Labour hours, times and other statistics required are identified and applied in calculations 1.2 Available machine hours are identified and applied in calculations 1.3 Economical batch sizes are identified 1.4 Material requirements are identified and applied in calculations
2. Prepare costing	2.1 Costing estimates are calculated using material, labour and

ELEMENT	PERFORMANCE CRITERIA
estimates	machine costs 2.2 Cost estimate details are calculated
3. Compare estimates with actual costs	3.1 Actual costs are compared with estimates 3.2 Costing basis is adjusted as appropriate

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.4, 2.1, 2.2, 3.1, 3.2	Recognises text within job specifications and work processes related to outcomes of the job
Writing	1.1-1.4, 2.1, 2.2, 3.1, 3.2	Uses factual information and industry related terminology to complete required workplace documentation
Numeracy	1.1-1.4, 2.1, 2.2, 3.1, 3.2	Uses mathematical calculations and techniques to deal with numerical information, and prepare estimates and costing models
Get the work done	1.1-1.4	Takes responsibility for gathering information required to perform estimates

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP553 Prepare production costing estimates	ICPSU553C Prepare production costing estimates	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP553 Prepare production costing estimates

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare an estimate of production costs that takes into account labour, machine and material requirements
- compare estimated costs against actual cost and adjust costing methods, if required.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Statutory requirements

- outline the legal requirements that affect costing of operations

Production processes and operations

- describe information required before costing/estimating can be done accurately
- describe the references and resources on materials and suppliers required to help in costing/estimating
- explain how choice of materials affects cost
- list ways of minimising production costs on any given job
- explain the relationship between costing and set up and changeover times for processes

Different costing/estimating methodologies

- explain why a particular costing/estimating method was chosen
- outline alternative methods and when it might be appropriate to use them
- describe factors that might be adjusted in the estimations if they consistently do not match costs

Sampling and quality control techniques

- describe effects that quality control has on costing

Production records

- describe why it is necessary to keep accurate production records
- outline how often a review of production records against actual costs should occur
- identify production monitoring systems that can be used to accurately assess costs.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to:

- an environment that allows the preparation of production costing estimates and actual costs
- appropriate sources of production data
- suitable equipment and tools to assist with calculations.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP554 Manage teams

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to supervise and coordinate other workers.

It applies to individuals who perform a broad range of skilled tasks relating to the printing and graphic arts industry, and who may also provide leadership and guidance to others in the application and planning of the skills.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Lead planning	1.1 Range of questioning and prompting techniques is applied to promote participative team or individual planning 1.2 Proposals are accurately recorded to reflect outcomes of planning 1.3 Plans take into account timelines, responsibilities and production requirements affecting the team or individual 1.4 Tasks are selected to suit skill levels of individuals or team

ELEMENT	PERFORMANCE CRITERIA
	members
2. Lead problem-solving	2.1 Problem is clearly defined by team or individuals involved, and criteria for selecting a solution are identified 2.2 Data or evidence is collected and analysed 2.3 Group or individual is encouraged to contribute to determine solutions 2.4 Alternatives are identified and solution selected 2.5 Implementation is planned and carried out 2.6 Implementation of solution is evaluated to determine effectiveness of decisions
3. Develop individual or team participation	3.1 Support is provided to individuals or team members to ensure full participation 3.2 Procedures are implemented to enable the team or individual to assess effectiveness
4. Check health and safety standards in work area	4.1 Applicable work health and safety (WHS) and environmental standards are identified, interpreted and implemented 4.2 Implementation of standards is monitored to determine work area safety 4.3 Improvements are recommended to achieve established standards
5. Monitor process standards	5.1 Quality and performance standards are identified, interpreted and implemented 5.2 Implementation of standards is monitored to determine effectiveness of process 5.3 Improvements are recommended to achieve established quality control standards
6. Communicate with work team, individuals and management	6.1 Information affecting work area, including WHS, is given logically and in an easily understood manner to other workers 6.2 Feedback from team members and individuals is sought to assist in the participation process 6.3 Communication and reporting is carried out, where required, with management and/or external personnel in a manner which ensures effective and appropriate information exchange

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.1, 2.2, 2.6, 4.1, 5.1	Recognises text within job specifications and workplace documentation related to outcomes of the job
Writing	1.2, 1.3, 2.2, 2.5, 2.6, 4.3, 5.3, 6.1, 6.3	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	1.1, 2.3, 6.1-6.3	- Provides clear explanations using language appropriate to audience and environment - Participates in verbal exchanges of ideas and solutions
Numeracy	1.3	Uses simple mathematical calculations when planning workplace deadlines
Navigate the world of work	4.1, 4.2, 6.1	Understands own legal rights and responsibilities, and is extending understanding of general legal principles across work contexts
Interact with others	2.3, 3.1, 6.2, 6.3	Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective group interaction
Get the work done	1.3, 1.4, 2.1, 2.2, 2.4-2.6, 3.2, 5.1, 5.2	- Develops plans to manage relatively complex, non-routine tasks with an awareness of how they may contribute to longer term operational and strategic goals - Uses systematic, analytical processes to solve problems in complex, non-routine situations; setting goals, gathering relevant information and identifying and evaluating options against agreed criteria - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes; actively looking for early warning signs and implementing contingency plans - Reflects on appropriateness and effectiveness of the problem-solving process used to identify improvement opportunities

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP554 Manage teams	ICPSU554C Manage teams	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP554 Manage teams

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop plans for individuals and teams that incorporate production requirements, responsibilities and timelines
- devise and implement a solution to a workplace problem
- monitor work health and safety (WHS), environmental quality and performance standards in the work area, and implement improvements if required
- provide clear instructions and information to team members and management
- develop and implement ways to seek feedback from others
- produce a portfolio demonstrating each element has been carried out (which can include rosters, schedules, quality related documentation and testimonials from superiors and workers being supervised).

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

WHS standards in the work area

- identify who is responsible for determining WHS standards
- identify who monitors the WHS standards in the workplace
- describe the responsibilities and rights of individuals in the workplace in relation to WHS

Planning production requirements of individuals to suit skill level

- explain why it is important to determine the skill level of workers
- describe methods used to determine the skill levels of workers

Promoting problem-solving and decision-making

- describe typical problems that arise in the workplace

- describe problem-solving techniques

Developing individual or team participation

- outline ways to encourage team members to participate
- outline ways to improve quality and performance standards
- describe types of checks on quality standards
- identify who has responsibility for implementing improvements to process standards
- outline the ramifications of standards not being improved

Workplace communication

- explain the principles of effective communication with individuals and teams in the workplace
- describe methods of seeking feedback
- outline reasons why seeking and using feedback is important to a team leader.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP561 Implement and monitor WHS

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to implement and monitor the organisation's work health and safety (WHS) policies, procedures and programs in the relevant work area to achieve and maintain WHS standards.

It applies to individuals who perform a broad range of skilled tasks relating to the printing and graphic arts industry, and who may also provide leadership and guidance to others in the application and planning of the skills.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Provide information about organisation's WHS	1.1 Relevant provisions of WHS legislation and codes of practice are accurately and clearly explained to the work group 1.2 Information on organisation's WHS policies, procedures and programs is provided in a readily accessible manner and is accurately and clearly explained to the work group 1.3 Information about identified hazards and outcomes of risk identification and control procedures is regularly provided and is

ELEMENT	PERFORMANCE CRITERIA
	accurately and clearly explained to the work group
2. Implement and monitor WHS	2.1 Organisational procedures for consultation over WHS issues are implemented and monitored to ensure all members of the work group have opportunity to contribute 2.2 Issues raised through consultation are dealt with and resolved promptly or referred to appropriate personnel for resolution according to enterprise procedures for issue resolution 2.3 Outcomes of consultation over WHS issues are made known promptly to the work group 2.4 Existing and potential hazards in work area are identified and reported so risk assessment and control procedures can be applied
3. Implement and monitor risk control procedures	3.1 Existing risk control measures are monitored and results reported regularly according to enterprise procedures 3.2 Inadequacies in existing risk control measures are identified according to hierarchy of control, and reported to designated personnel 3.3 Inadequacies in resource allocation for implementation of risk control measures are identified and reported to designated personnel 3.4 Work procedures to control risks are implemented and adherence to them by the work group is monitored according to enterprise procedures
4. Implement hazardous events procedures	4.1 Enterprise procedures for dealing with hazardous events are implemented whenever necessary to ensure prompt control action is taken 4.2 Hazardous events are investigated to identify their cause, according to investigation procedures 4.3 Control measures to prevent recurrence and minimise risks of hazardous events are implemented based on hierarchy of control if within scope of responsibilities and competencies, or alternatively referred to designated personnel for implementation
5. Implement and monitor WHS training	5.1 WHS training needs are identified accurately specifying gaps between WHS competencies required and those held by work group members 5.2 Arrangements are made for fulfilling identified WHS training needs in both on and off-the-job training programs in consultation with relevant parties
6. Implement and monitor	6.1 WHS records for work area are accurately and legibly

ELEMENT	PERFORMANCE CRITERIA
WHS recordkeeping procedures	completed according to workplace requirements for WHS records and legal requirements for maintenance of records of occupational injury and disease 6.2 Aggregate information from area's WHS records is used to identify hazards and monitor risk control procedures within work area according to organisational procedures and within scope of responsibilities

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.2, 3.1-3.4, 4.2, 4.3, 5.1, 5.2, 6.1, 6.2	- Interprets and comprehends information in a range of texts including relatively complex regulatory documents and workplace policies and procedures - Checks documents for accuracy
Writing	1.2, 1.3, 2.4, 3.1-3.3, 4.2, 4.3, 5.1, 5.2, 6.1, 6.2	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	1.1-1.3, 2.2, 3.3, 4.3, 5.2	- Provides clear explanations using language appropriate to audience and environment - Uses questioning and active listening to confirm understanding
Navigate the world of work	1.1-1.3, 2.1, 2.2, 3.1, 3.4, 4.2, 6.1, 6.2	- Keeps up-to-date on changes to legislation and regulations relevant to own rights and responsibilities and considers implications of these when negotiating, planning and undertaking work - Understands how own role meshes with others and contributes to broader work goals
Interact with others	1.2, 1.3, 2.1-2.3	Identifies requirements of important communication exchanges, selecting appropriate channels, format, and content to suit purpose and audience
Get the work done	2.2, 2.4, 3.2, 3.3, 4.2, 4.3, 5.1, 5.2, 6.1, 6.2	- Plans and manages relatively complex, non-routine tasks with an awareness of how they contribute to the organisation's goals - Uses systematic, analytical processes to solve problems in complex, non-routine situations

		- Gathers and evaluates information to make informed decisions or recommendations - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP561 Implement and monitor WHS	ICPSU561C Implement and monitor OHS	Updated to meet Standards for Training Packages Title changed to reflect legislation	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP561 Implement and monitor WHS

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- provide written and oral information to a work group about work health and safety (WHS) legislation, codes of practice, and organisational policies, procedures and programs
- identify and report on existing and potential hazards in the work area
- monitor and report on existing risk control measures, including identified inadequacies
- investigate hazardous events according to organisational procedures
- identify WHS training needs and implement training for a work group
- complete and store WHS records according to legal and organisational requirements
- produce a portfolio of relevant documentation to demonstrate achievement of the unit requirements (including information distributed to workers, records kept, checklists and reports.)

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify all applicable WHS legislation and codes of practice
- describe the hierarchy of control, including the preferred order of risk control measures
- outline potential hazards associated with equipment and materials used in the workplace
- explain the relevance of other management systems for WHS
- explain why levels of literacy and communication levels in the workforce need to be considered when providing information about WHS
- explain the role of the supervisor regarding implementation of WHS policies and procedures
- explain why WHS training is important
- list and describe available information sources about WHS.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP583 Troubleshoot and optimise the production process

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to troubleshoot and optimise the production process. This unit focuses on systems analysis and design.

It applies to individuals who perform a broad range of skilled tasks relating to the printing and graphic arts industry, and who may also provide leadership and guidance to others in the application and planning of the skills. They evaluate and recommend changes to the production process, and adjust and tune machinery to make efficiency gains.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Evaluate production for efficiency purposes	1.1 Machine operations, staff and production process organisation are evaluated on an ongoing basis to make production efficiency gains 1.2 Production schedule is analysed according to production output, inventory, procurements, time constraints, supply capacities and requirements 1.3 Quality standards and safe work practices are examined to

ELEMENT	PERFORMANCE CRITERIA
	ensure compliance 1.4 Changeover/make ready processes are reviewed for production efficiency gains 1.5 Recommendations covering the above areas are developed and documented
2. Optimise production efficiency	2.1 Compliance to specified requirements is checked to ensure efficiency is maintained 2.2 Non-compliance is identified and investigated to determine causes 2.3 Production standards or machines are set and/or changed according to enterprise procedures 2.4 Changeover/make ready times and processes are monitored to ensure times are maintained or improved 2.5 Production schedule is monitored and adjusted according to production output, inventory, procurements, time constraints and supply capacities and requirements to ensure efficiency is maintained
3. Troubleshoot production efficiency problems	3.1 Corrective or preventive action is implemented where appropriate 3.2 Changes are communicated to relevant personnel in a logical and easily understood manner 3.3 Changes are monitored and adjusted to confirm improvement to production efficiency
4. Troubleshoot material and machining problems	4.1 Evaluation of material or product structure is conducted to identify options for production and required tuning and adjustments are completed 4.2 Idiosyncrasies of machines are reviewed and adjustments or tuning undertaken to compensate or to exploit the idiosyncrasy within the manufacturer's specifications 4.3 Options are assessed to determine most effective/efficient method of production, ensuring highest quality and yield from materials and ease of production 4.4 Options and recommendations are documented for future reference according to enterprise procedures
5. Document changes and remedies	5.1 Changes to production process are documented according to enterprise procedures 5.2 Adjustments to machines are recorded according to enterprise

ELEMENT	PERFORMANCE CRITERIA
	procedures 5.3 Documentation is circulated according to enterprise procedures, if required

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.5, 2.1-2.5, 3.2, 4.4, 5.1-5.3	- Interprets and comprehends information in a range of texts including relatively complex workplace policies and procedures - Examines records to determine compliance
Writing	1.5, 2.3, 2.5, 3.3, 4.1, 4.4, 5.1, 5.2	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	3.2	Provides clear explanations using language appropriate to audience and environment
Numeracy	1.4, 2.4, 2.5, 4.2, 4.3	Uses simple mathematical calculations and arranges numerical information sequentially when dealing with time constraints and machine optimisation
Navigate the world of work	1.3, 2.1, 2.3, 4.4, 5.1-5.3	- Takes full responsibility for compliance with organisational policies and procedures - Understands how own role meshes with others and contributes to broader work goals
Interact with others	3.2, 5.3	Identifies requirements of important communication exchanges, selecting appropriate channels, format, and content to suit purpose and audience
Get the work done	1.1, 1.2, 1.5, 2.2-2.4, 3.1, 3.3, 4.1-4.3	- Develops plans to manage relatively complex, non-routine tasks with an awareness of how they contribute to operational and strategic goals - Uses systematic, analytical processes to solve problems in complex, non-routine situations; setting goals, gathering relevant information and identifying and evaluating options against agreed criteria - Recognises and anticipates an increasing range of familiar problems and develop contingency plans for implementation, as required

		Reflects on how digital systems and tools are used, or could be used to achieve work goals

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP583 Troubleshoot and optimise the production process	ICPSU583C Troubleshoot and optimise the production process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP583 Troubleshoot and optimise the production process

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- recommend and implement new, more efficient production processes and troubleshoot problems within the production process that affect efficiency gains
- produce a portfolio that demonstrates each element has been carried out (including records of standards and monitoring procedures, and evidence of effectiveness)
- create production efficiencies – confirmed through discussions with senior management and review of workplace documentation.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

Setting quality standards

- describe how inspection criteria for print quality are set
- explain why quality of artwork/film has a bearing on quality of the printed product
- list quality standards set by the customer
- explain how quality standards determine inspection specifications

Identifying production requirements and capacities

- describe job requirements that determine production processes
- explain how to identify special production requirements and possible problems
- list criteria used to determine availability of machines, materials and labour
- identify work health and safety (WHS) concerns to consider when planning production

Causes of failure

- list common causes of failure in each production area that need to be monitored

- list procedures implemented to minimise the effect of failure.

Revising schedules

- explain how production schedules are monitored and amended
- describe consideration given to revising production schedules to take customer requirements and job complexity into account

Evaluating re-work methods

- outline who is responsible for evaluating re-work of unacceptable items
- identify the method of re-work that has been determined
- list criteria set to monitor re-work
- describe requirements established for inspection of re-working material to customer's specifications

Determining unacceptable items and evaluating production procedures

- identify what causes unacceptable items
- describe records kept on acceptable and rejected items
- describe records kept on the reason for rejection
- determine the cause for the rejection and explain how the problem has been rectified

Quality improvements

- explain information that needs to be monitored to maintain standards
- identify who should be involved in monitoring quality standards
- explain how enterprise improvements affect quality standards.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSUP684 Determine and improve process capability

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to process capability; which is a statistical concept that allows a practitioner to assess required performance against actual (as distinct from design) capability of the process. Process capability is typically calculated using standard deviations.

It applies to individuals working as managers, or in a technical expert support role, who are responsible for developing plans to improve process capability and, following agreement, implementation of the plans to improve process capability.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Obtain data for process capability study	1.1 Identify the process requiring capability analysis 1.2 Obtain process capability data
2. Analyse data	2.1 Identify causes of systematic variation in liaison with relevant personnel 2.2 Develop solutions to eliminate/minimise systematic variation

ELEMENT	PERFORMANCE CRITERIA
	in liaison with relevant people
3. Take action to improve process capability	3.1 Develop plans to implement solutions 3.2 Liaise with relevant people to implement solutions 3.3 Gain necessary approvals as required 3.4 Monitor implementation and make adjustments as required 3.5 Determine new/revised process capability 3.6 Implement revised process capability regime

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 3.4	Recognises text within job specifications and work processes related to outcomes of the job
Writing	2.2, 3.1, 3.4	Uses clear, specific and industry related terminology to complete and update workplace documentation
Oral Communication	2.1, 2.2, 3.2	- Participates in a verbal exchange of ideas and solutions - Uses questioning and active listening to identify issues or clarify understanding
Interact with others	2.1, 2.2, 3.2, 3.3	- Collaborates with others to achieve joint outcomes playing an active role in facilitating agreement - Uses appropriate communication protocols to gain approvals from relevant personnel
Get the work done	1.1, 1.2, 2.2, 3.1, 3.4-3.6	- Develop and implements plans to gather and analyse data required to improve processes - Identifies causes of problems and develops solutions in conjunction with relevant personnel - Systematically evaluates effectiveness of systems and processes to inform decisions on how to implement improvements - Evaluates outcomes of decisions to identify opportunities for improvement

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP684 Determine and improve process capability	ICPSU684C Determine and improve process capability	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP684 Determine and improve process capability

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- implement and review either ONE complex process capability system or SEVERAL smaller systems and make process improvements using process capability as a tool for monitoring and improvement or a suitable project
- provide a portfolio of evidence to show that the implementation and review has included process capability studies, the improvement to process capability, and how the improvements were implemented.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline data collection and processing methods and techniques
- describe concepts of variability and normal distribution
- describe three sigma or six sigma processes
- explain how to recognise assignable causes (random and non-random results)
- outline causes of random variation
- identify causes of different types of non-random results
- understand process capability sufficiently to translate data into variations in the process and determine methods of controlling them.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the Support field of work and include access to an organisation using process capability.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

AUMAQA001 Apply quality assurance techniques

Modification History

Release	Comment
Release 1	Unit updated to reflect the new standards for Training Packages Replaces AUMAQA4001 Apply quality assurance techniques
Release 2	Amendments made to the unit to include OHS requirements. Reference to SNR updated to NVR in Assessment Conditions to reflect new Standards for Registered Training Organisations.

Application

This unit describes the performance outcomes required to apply quality assurance techniques required in an automotive manufacturing environment.

It involves the application of skills and knowledge during the design, development and production of automotive plant, tools, equipment and systems at a production worker level.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Competency Field

Manufacturing - Common

Unit Sector

Quality

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section
1. Interpret and apply workplace quality	1.1 <i>Instructions</i> and plans are interpreted to identify processes and materials to complete work tasks

Elements	Performance Criteria
standards	1.2 Workplace quality standards are interpreted and applied to work tasks 1.3 Process improvement tools are used either individually or in a team to identify design, development and production quality problems
2. Monitor and report on quality	2.1 Finished materials and products are checked for quality against workplace quality standards and according to workplace procedures 2.2 Non-conforming materials and products are identified and reported 2.3 Quality problems are analysed to identify the root cause using analytical tools 2.4 Strategies to improve quality are developed and recommended according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Skills	Description
Reading skills to:	- identify and review quality improvement plans - interpret instructions and plans, relevant legislation, regulations, standards, codes of practice, safe work practices and workplace procedures.
Writing skills to:	legibly record and report quality improvement progress.
Oral communication skills to:	- communicate between production and quality team members - discuss quality improvement plans with team leader and clarify quality assurance requirements.
Numeracy skills to:	- use analytical tools, instructions and plans - calculate materials to complete work tasks.
Digital literacy skills to:	use computers and computer software, such as email, databases, spreadsheets and word processing.
Teamwork skills to:	work effectively with diverse team members.

Range of Conditions

and occupational health and safety (OHS) This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Bold italicised wording, if used in the performance criteria, is detailed below.

<i>Instructions</i> must include:	• engineering specifications and drawings • operator instruction systems (OIS) or workplace equivalent • process control plans (PCPs) or workplace equivalent • standard operating procedures (SOPs) or workplace equivalent.
<i>Workplace procedures</i> must include:	• quality standards • use of tools and equipment • work health and safety (WHS) and occupational health and safety (OHS) requirements • workplace recording and reporting.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=bd587669-08b3-4cd5-85f0-f9fa0c6304c1>

Assessment Requirements for AUMAQA001 Apply quality assurance techniques

Modification History

Release	Comment
Release 1	Unit updated to reflect the new standards for Training Packages Replaces AUMAQA4001 Apply quality assurance techniques
Release 2	Amendments made to the unit to include OHS requirements. Reference to SNR updated to NVR in Assessment Conditions to reflect new Standards for Registered Training Organisations.

Performance Evidence

Before competency can be determined, individuals must have competently applied quality standards on a minimum of three occasions.

Individuals must demonstrate they can:

- comply with workplace production standards and quality assurance techniques
- apply workplace procedures relating to quality assurance techniques
- communicate effectively with team leaders and team members to ensure quality assurance
- document quality improvement activity and techniques
- complete quality improvement reports.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- quality processes
- workplace procedures relating to quality assurance techniques
- process improvement tools
- processes and procedures for implementing quality improvement activities, including:
 - processes and required resources from a quality improvement plan
 - identifying and allocating tasks from the quality improvement plan
 - recording and reporting procedures for monitoring progress of quality improvement plan activities
- types, layout and application of quality improvement activity reports.

Assessment Conditions

Assessors must satisfy NVR/AQTF assessor requirements.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the application of quality assurance techniques.

Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application.

The following resources must be made available:

- automotive manufacturing workplace or simulated workplace
- tools, equipment and machinery required when producing motor vehicles
- workplace procedures relating to quality assurance techniques
- quality improvement plan
- process control plans (PCPs) or workplace equivalent.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=bd587669-08b3-4cd5-85f0-f9fa0c6304c1>

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=bd587669-08b3-4cd5-85f0-f9fa0c6304c1>

BSBCMM401 Make a presentation

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0

Application

This unit covers the skills and knowledge required to prepare, deliver and review a presentation to a target audience.

This unit applies to individuals who may be expected to make presentations for a range of purposes, such as marketing, training and promotions. They contribute well developed communication skills in presenting a range of concepts and ideas.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Communication – Interpersonal Communication

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Prepare a presentation	1.1 Plan and document presentation approach and intended outcomes 1.2 Choose presentation strategies, format and delivery methods that match the characteristics of the target audience, location, resources and personnel needed 1.3 Select presentation aids, materials and techniques that suit the format and purpose of the presentation, and will enhance audience understanding of key concepts and central ideas

ELEMENT	PERFORMANCE CRITERIA
	1.4 Brief others involved in the presentation on their roles/responsibilities within the presentation 1.5 Select techniques to evaluate presentation effectiveness
2 Deliver a presentation	2.1 Explain and discuss desired outcomes of the presentation with the target audience 2.2 Use presentation aids, materials and examples to support target audience understanding of key concepts and central ideas 2.3 Monitor non-verbal and verbal communication of participants to promote attainment of presentation outcomes 2.4 Use persuasive communication techniques to secure audience interest 2.5 Provide opportunities for participants to seek clarification on central ideas and concepts, and adjust the presentation to meet participant needs and preferences 2.6 Summarise key concepts and ideas at strategic points to facilitate participant understanding
3 Review the presentation	3.1 Implement techniques to review the effectiveness of the presentation 3.2 Seek and discuss reactions to the presentation from participants or from key personnel involved in the presentation 3.3 Utilise feedback from the audience or from key personnel involved in the presentation to make changes to central ideas presented

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.3, 2.2	Reviews and analyses documents to identify information relevant to a specific presentation
Writing	1.1, 3.3	Develops material to convey ideas and information to target audience in an engaging way
Oral	1.4, 2.1, 2.2, 2.3,	Presents information using words and non-verbal features appropriate to the audience and context

Communication	2.4, 2.5, 2.6, 3.2	• Uses listening and questioning techniques to gather information required to develop or modify presentations • Interprets audience reactions and changes words or non-verbal features accordingly
Interact with others	1.4, 2.1, 2.2, 2.4, 2.5, 2.6, 3.2	• Selects and uses appropriate conventions and protocols to encourage interaction or to present information • Demonstrates sophisticated control over oral, visual and written formats, drawing on a range of communication practices to achieve goals • Recognises the need to alter personal communication style in response to the needs or expectations of others
Get the work done	1.1-1.5, 2.2, 2.5, 3.1-3.3	• Takes responsibility for planning, sequencing and prioritising tasks and own workload to achieve outcomes • Uses feedback from others, analytical and lateral thinking to review current practices and develop new ideas • Uses the main features and functions of digital tools to complete work tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBCMM401 Make a presentation	BSBCMM401A Make a presentation	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBCMM401 Make a presentation

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare and deliver presentations related to occupation or area of interest which demonstrate the use of:
 - effective presentation strategies and communication principles
 - aids and materials to support the presentation
- select and implement methods to review the effectiveness of own presentation and document any changes which would improve future presentations.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify information collection methods that will support review and feedback of presentations
- identify regulatory and organisational obligations and requirements relevant to presentations
- describe the principles of effective communication
- describe the range of presentation aids and materials available to support presentations.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced by individuals using interpersonal communication skills in the workplace and include access to:

- equipment, materials and business software packages for making a presentation
- business technology
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBCRT301 Develop and extend critical and creative thinking skills

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes skills and knowledge required to develop the habit of thinking in a more creative way through looking at things differently, musing, testing, experimenting and challenging existing thought patterns.

It applies to individuals who need to develop and extend their critical and creative thinking skills to different issues and situations and have a range of problem solving, evaluation and analysis skills.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Creativity and Innovation – Creative Thinking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Develop a questioning mindset	1.1 Develop the habit of asking questions from different perspectives 1.2 Take responsibility for exploring a variety of information sources to provide relevant answers to own questions 1.3 Sort through information and ideas to identify the central questions, issues and challenges

ELEMENT	PERFORMANCE CRITERIA
	1.4 Challenge preconceptions and assumptions to determine actual constraints in defining a problem for resolution
2 Generate ideas and responses	2.1 Explore and use a range of creative thinking techniques to generate ideas and responses 2.2 Muse on, play around with and have fun with ideas in relation to a perceived objective 2.3 Identify and challenge blockers to creative thinking 2.4 Consider and explore realities beyond the current situation 2.5 Evaluate, and where appropriate, challenge existing boundaries to determine perceived or actual constraints 2.6 Show willingness to take risks with ideas and thought processes 2.7 Look around in familiar and unfamiliar places for new inspiration and habitually record observations, experiences, ideas and reflective thoughts to broaden personal knowledge base 2.8 Acknowledge and accept the opportunity for revelation when least expected 2.9 Identify connections and associations from things that seem unconnected
3 Challenge, test and re invent ideas	3.1 Identify, interrogate and challenge the assumptions behind ideas 3.2 Experiment with variations, and explore and challenge a range of different solutions and ideas 3.3 Consciously change perspectives, and evaluate ideas and situations in new ways 3.4 Where appropriate, involve others in ideas and how they might change or be improved
4 Enhance creative thinking skills	4.1 Consciously challenge and question own thought patterns and ways of responding to work and life situations 4.2 Identify and take opportunities to self-assess and to learn about new ideas and different ways of thinking 4.3 Take opportunities to practise and experiment with creative thinking techniques across work and life situations 4.4 Pro-actively talk to others about ways that new ideas and patterns of thinking can be encouraged and developed

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	1.2, 2.7, 4.2	• Uses questioning as a strategy to expand knowledge • Reflects on existing thinking and current practices to generate new ideas
Reading	1.2, 1.3	• Comprehends textual information and integrates ideas and concepts from various sources
Writing	2.7	• Takes notes on observations, experiences and thoughts
Oral Communication	3.4, 4.4	• Participates in a verbal exchange of ideas and elicits the view and opinions of others by listening and questioning
Interact with others	3.4, 4.4	• Collaborates with others to test, strengthen and explore new ideas and different ways of thinking
Get the work done	1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.2, 4.2, 4.3	• Uses analytical techniques to identify issues and evaluate options • Contributes to the design of new approaches within the immediate work environment • Understands and applies some basic principles of analytical and lateral thinking to identify and select ideas

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBCRT301 Develop and extend critical and creative thinking skills	BSBCRT301A Develop and extend critical and creative thinking skills	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBCRT301 Develop and extend critical and creative thinking skills

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- ask relevant questions to challenge and enhance creative thinking
- use various information sources to provide answers to own questions
- use a range of creative thinking techniques to generate ideas or responses to questions or issues
- record ideas in response to a predetermined issue or situation.

Note: if a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain why it is important to consider different perspectives when asking questions
- list and describe different creative thinking techniques
- describe common blockers to creative thinking,
- explain boundaries that need to be considered when generating ideas and responses
- describe ways of extending and developing individual creative thinking skills.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the creativity and innovation – critical thinking field of work and include access to specific challenges and situations to which creative thinking may be applied.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBCUS301 Deliver and monitor a service to customers

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to identify customer needs, deliver and monitor customer service and identify improvements in the provision of customer service.

It applies to individuals who apply a broad range of competencies in various work contexts. In this role, individuals often exercise discretion and judgement using appropriate theoretical knowledge of customer service to provide technical advice and support to customers over short or long term interactions.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Stakeholder Relations – Customer Service

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Identify customer needs	1.1 Use appropriate interpersonal skills to accurately identify and clarify customer needs and expectations 1.2 Assess customer needs for urgency to determine priorities for service delivery according to organisational and legislative requirements 1.3 Use effective communication to inform customers about available choices for meeting their needs and assist in the selection

ELEMENT	PERFORMANCE CRITERIA
	of preferred options 1.4 Identify limitations in addressing customer needs and seek appropriate assistance from designated individuals
2 Deliver a service to customers	2.1 Provide prompt service to customers to meet identified needs in accordance with organisational and legislative requirements 2.2 Establish and maintain appropriate rapport with customers to ensure completion of quality service delivery 2.3 Sensitively and courteously handle customer complaints in accordance with organisational and legislative requirements 2.4 Provide assistance or respond to customers with specific needs according to organisational and legislative requirements 2.5 Identify and use available opportunities to promote and enhance services and products to customers
3 Monitor and report on service delivery	3.1 Regularly review customer satisfaction with service delivery using verifiable evidence according to organisational and legislative requirements 3.2 Identify opportunities to enhance the quality of service and products, and pursue within organisational and legislative requirements 3.3 Monitor procedural aspects of service delivery for effectiveness and suitability to customer requirements 3.4 Regularly seek customer feedback and use to improve the provision of products and services 3.5 Ensure reports are clear, detailed and contain recommendations focused on critical aspects of service delivery

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2 2.1, 2.3, 2.4, 3.1, 3.5	- Comprehends textual information to determine customer service requirements - Proofreads texts for clarity of meaning and accuracy of grammar and punctuation

Writing	2.3, 3.5	- Completes responses to customer complaints in required format - Prepares reports using sequencing, format and words to communicate recommendations clearly and effectively
Oral Communication	1.1, 1.3, 1.4, 2.2, 2.3, 2.4	- Provides information or advice using structure and language to suit the audience - Asks questions and listens to gain information or confirm understanding
Navigate the world of work	1.2, 2.1-2.4, 3.1, 3.2	Recognises, understands and applies organisational policies and procedures relevant to role
Interact with others	1.1, 1.3, 1.4, 2.2, 2.3, 2.4, 3.4	- Selects and uses appropriate communication conventions to establish connections, build rapport, seek information and develop professional working relationships - Adjusts personal communication style in response to the opinions, values and particular needs of others
Get the work done	1.2, 2.3, 2.5, 3.1-3.5	- Plans and implements systems to gather and organise information - Monitor actions and progress against goals and implements adjustments as appropriate - Uses problem-solving skills to analyse and respond to customer complaints or enquiries - Identifies and follows up on opportunities to improve work practices and outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBCUS301 Deliver and monitor a service to customers	BSBCUS301B Deliver and monitor a service to customers	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBCUS301 Deliver and monitor a service to customers

Modification History

Release	Comments
Release 1	This version first released with Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use communication skills to establish rapport and build relationships with customers in accordance with organisational requirements
- identify customer needs using appropriate questioning and active listening skills
- provide customer service in accordance with organisational requirements
- respond to and record customer feedback and action taken according to organisational standards, policies and procedures
- produce a report which identifies and recommends ways to improve service delivery.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise key provisions of relevant legislation from all levels of government that may affect aspects of business operations
- explain organisational policy and procedures for customer service, including handling customer complaints
- provide examples of verifiable evidence that could be used to review customer satisfaction
- outline the interpersonal skills needed for serving customers, including customers with specific needs.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the customer service field of work and include access to:

- office equipment and technology
- workplace documents, organisational policies and procedures for customer service
- examples of customer complaints and feedback
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBCUS401 Coordinate implementation of customer service strategies

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0 Version created to clarify assessment conditions
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to advise, carry out and evaluate customer service strategies.

It applies to individuals who have well developed skills and a broad knowledge of customer service strategies for addressing customer needs and problems, and who may provide guidance or delegate work related tasks to others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Stakeholder Relations – Customer Service

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Advise on customer service needs	1.1 Clarify and accurately assess customer needs using appropriate communication techniques

ELEMENT	PERFORMANCE CRITERIA
	1.2 Diagnose problems matching service delivery to customers and develop options for improved service within organisational requirements 1.3 Provide relevant and constructive advice to promote the improvement of customer service delivery 1.4 Use business technology and/or online services to structure and present information on customer service needs
2 Support implementation of customer service strategies	2.1 Ensure customer service strategies and opportunities are promoted to designated individuals and groups 2.2 Identify and allocate available budget resources to fulfil customer service objectives 2.3 Promptly action procedures to resolve customer difficulties and complaints within organisational requirements 2.4 Ensure that decisions to implement strategies are taken in consultation with designated individuals and groups
3 Evaluate and report on customer service	3.1 Review client satisfaction with service delivery using verifiable data in accordance with organisational requirements 3.2 Identify and report changes necessary to maintain service standards to designated individuals and groups 3.3 Prepare conclusions and recommendations from verifiable evidence and provide constructive advice on future directions of client service strategies 3.4 Maintain systems, records and reporting procedures to compare changes in customer satisfaction

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.4, 2.3, 3.1	Reviews textual information and comprehends details that relate to the interests or requirements of the client and organisation
Writing	1.4, 3.3, 3.4	Creates a range of formal texts using structure, grammar and clear and specialised language to

		describe customer needs, maintain information and support a particular position
Oral Communication	1.1, 1.3, 2.1, 2.4, 3.2	Uses pace, intonation, intelligible pronunciation and listening and questioning techniques to interact effectively with others
Numeracy	2.2	Recognises and interprets numerical information and performs calculations on familiar mathematical information
Navigate the world of work	1.2, 2.3, 3.1, 3.2	Recognises and applies organisational protocols and meets expectations associated with own work
Interact with others	1.1, 1.3, 2.1, 2.4, 3.2, 3.3	- Selects the appropriate form, channel and mode of communication for a specific purpose relevant to own role - Uses a range of strategies to establish a sense of connection and build rapport with customers - Collaborates with others contributing knowledge and skills to achieve joint outcomes
Get the work done	1.2, 1.4, 2.3, 3.1- 3.4	- Applies formal and logical processes when planning and implementing tasks - Applies standard procedures when responding to familiar problems within own work context - Uses digital technologies to access, organise, present and store information relevant to own role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBCUS401 Coordinate implementation of customer service strategies Release 2	BSBCUS401 Coordinate implementation of customer service strategies Release 1	Updated to clarify assessment conditions	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBCUS401 Coordinate implementation of customer service strategies

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify assessment conditions
Release 1	This version first released with Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify the needs and priorities of the organisation in delivering services to customers
- diagnose problems in delivery of customer service
- respond to and report on customer feedback and complaints
- review client satisfaction using verifiable data
- consult and communicate effectively with relevant people
- develop and implement strategies and methods to improve customer service delivery including:
 - budgeting
 - promotion to staff
 - documentation and follow up.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the principles of customer service
- explain sources of information and techniques for identifying customer needs and reviewing customer satisfaction
- explain the organisational business structure, products and services related to customer service
- describe product and service standards and best practice models.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the customer service field of work and include access to:

- office equipment
- business technology
- organisational policies and procedures for customer service
- examples of customer complaints and feedback
- client satisfaction data
- case studies and, where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBCUS501 Manage quality customer service

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify assessment conditions
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to develop strategies to manage organisational systems that ensure products and services are delivered and maintained to standards agreed by the organisation.

It applies to individuals who supervise the provision of quality customer service within an organisation's procedures framework by others. At this level, individuals must exercise considerable discretion and judgement, using a range of problem solving and decision making strategies.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Stakeholder Relations – Customer Service

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Plan to meet internal and external customer	1.1 Investigate, identify, assess, and include the needs of customers in planning processes

ELEMENT	PERFORMANCE CRITERIA
requirements	1.2 Ensure plans achieve the quality, time and cost specifications agreed with customers
2 Ensure delivery of quality products and services	2.1 Deliver products and services to customer specifications within organisation's business plan 2.2 Monitor team performance to consistently meet the organisation's quality and delivery standards 2.3 Help colleagues overcome difficulties in meeting customer service standards
3 Monitor, adjust and review customer service	3.1 Develop and use strategies to monitor progress in achieving product and/or service targets and standards 3.2 Develop and use strategies to obtain customer feedback to improve the provision of products and services 3.3 Develop, procure and use resources effectively to provide quality products and services to customers 3.4 Make decisions to overcome problems and to adapt customer services, products and service delivery in consultation with appropriate individuals and groups 3.5 Manage records, reports and recommendations within the organisation's systems and processes

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 3.1, 3.2, 3.3, 3.5	Interprets and analyses textual information from a variety of sources and applies the knowledge that has been gained to evaluate standards for organisation's products and services
Writing	1.2, 3.1, 3.2, 3.3, 3.5	Produces a range of text types to convey information, requirements or recommendations matching style of writing to purpose and audience
Oral Communication	1.1, 1.2, 2.1, 2.3, 3.2	- Clearly articulates systems and standards in a team environment using language suitable to diverse audiences - Uses listening and questioning techniques to obtain

		feedback and confirm understanding
Numeracy	1.2	Interprets and comprehends mathematical information in organisation's business and customer service plans.
Navigate the world of work	2.1, 2.2, 3.1, 3.5	Recognises and applies organisational protocols and meets expectations associated with own work
Interact with others	1.1, 2.3, 3.4	- Identifies and uses appropriate conventions and protocols when communicating with colleagues and customers - Collaborates with others, taking into account their strengths and experience, to achieve desired outcomes - Provides support in field of expertise to team
Get the work done	1.1, 1.2, 2.1, 2.2, 3.1-3.5	- Develops and implements plans using logical processes and monitors and evaluates progress against stated goals - Accepts responsibility for addressing complex or non-routine difficulties, applying problem solving processes in determining a solution. - Uses digital technology to access, organise and present information in a format that meets requirements

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBCUS501 Manage quality customer service Release 2	BSBCUS501 Manage quality customer service Release 1	Updated to clarify assessment conditions	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBCUS501 Manage quality customer service

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0 Version created to clarify assessment conditions
Release 1	This version first released with Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop and manage organisational systems for quality customer service
- develop and review plans, policies and procedures for delivering and monitoring quality customer service
- implement policies and procedures to ensure quality customer service
- solve complex customer complaints and system problems that lead to poor customer service
- monitor and assist teams to meet customer service requirements
- develop, procure and use human and physical resources to support quality customer service delivery.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the legislative and regulatory context of the organisation relevant to customer service
- describe organisational policy and procedures for customer service including handling customer complaints
- identify service standards and best practice models
- summarise public relations and product promotion
- outline techniques for dealing with customers including customers with specific needs

- explain techniques for solving complaints including the principles and techniques involved in the management and organisation of:
 - customer behaviour
 - customer needs research
 - customer relations
 - ongoing product and/or service quality
 - problem identification and resolution
 - quality customer service delivery
 - record keeping and management methods
 - strategies for monitoring, managing and introducing ways to improve customer service relationships
 - strategies to obtain customer feedback.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the customer service field of work and include access to:

- legislation, regulations and codes of practice related to customer service
- business technology
- workplace documentation and resources
- complex customer complaints
- case studies and, where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBDES301 Explore the use of colour

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to explore the use of colour and to apply colour theory.

It applies to individuals whose work involves understanding and applying the effective use of colour.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Design – Design Process

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Source information on colour and colour theory	1.1 Identify and access sources of information on colour and colour theory 1.2 Evaluate and collate information to build knowledge of colour and its application in different contexts
2 Experiment with colour	2.1 Test different colours and colour-combinations through experimentation 2.2 Use own ideas as a way of testing, challenging or confirming colour theory

ELEMENT	PERFORMANCE CRITERIA
	2.3 Ensure safe use of materials, tools and equipment during experimentation with colour
3 Communicate concepts and ideas through use of colour	3.1 Investigate how colour might be used to communicate a particular idea or concept 3.2 Select materials, tools and equipment relevant to the idea or concept 3.3 Apply colour to communicate the concept or idea based on own knowledge of colour and colour theory 3.4 Review and reflect on own use of colour and what it communicates 3.5 Seek and obtain feedback from others about the way colour has been used and its success in communicating the concept or idea 3.6 Present and store work any samples in a way which takes account of the need for professional presentation and potential relevance for future work

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.3, 3.1	Evaluates and integrates facts and descriptions of colour from a range of texts including text embedded in visual media
Writing	1.2, 3.6	- Produces a range of text types using appropriate vocabulary, grammatical structure and conventions - Applies basic referencing and sequencing of professional and archival resources
Oral Communication	1.1, 3.5	Presents ideas, asks questions and listens, to seek feedback or generate ideas
Numeracy	2.1	Selects and uses mathematical information for measurement and volume
Navigate the world of work	2.3	Takes some personal responsibility for adherence to legal and regulatory requirements with specific reference to safety

Get the work done	1.1, 1.2, 2.1, 2.2, 3.1-3.4, 3.6	- Plans, sequences and implements tasks required to achieve outcomes - Takes responsibility for routine low-impact decisions within familiar situations - Evaluates effectiveness of decisions on how well they meet stated goals - Contributes to the design of new approaches within immediate work environment - Follows routine procedures for using digital technology to enter, store and retrieve information directly relevant to role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBDES301 Explore the use of colour	BSBDES301A Explore the use of colour	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBDES301 Explore the use of colour

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- research information on colour and colour theory to inform work
- experiment with different colours and techniques to communicate a concept or idea
- review completed work and present and store samples for future reference.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain colour attributes and colour relationships
- describe and interpret different colour theories and their applications in different contexts
- describe individual interpretation and choice in relation to the use of colour, and the potential limitations of theory
- identify different materials, tools and equipment required to experiment with colour
- describe ways other practitioners use colour in their work.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the design process field of work and include access to:

- office equipment and resources
- materials, resources and equipment needed to apply colour in the relevant work context.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBDES302 Explore and apply the creative design process to 2D forms

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to explore and creatively apply the design process to the development of two-dimensional (2D) forms.

It applies to individuals who apply the creative design process to the development of 2D forms. The unit underpins many other specialised design units.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Design – Design Process

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Source information on 2D design	1.1 Identify and access relevant sources of information on 2D design 1.2 Evaluate and collate information to build knowledge of 2D design
2 Explore the creative design process for 2D forms	2.1 Use creative thinking techniques to generate a range of ideas and options 2.2 Use experimentation to explore and challenge a range of

ELEMENT	PERFORMANCE CRITERIA
	different ideas 2.3 Challenge assumptions, reflect on ideas and refine approaches 2.4 Consciously change perspective, and evaluate ideas and situations in new ways
3 Communicate concepts or ideas through application of design processes to 2D forms	3.1 Investigate and reflect on how a particular concept or idea might be communicated in 2D 3.2 Select materials, tools and equipment relevant to the realisation of the concept or idea 3.3 Apply a creative design process to produce a range of 2D concept realisations 3.4 Reflect on own application of design process and success in communicating the concept or idea 3.5 Seek and obtain feedback from others about the 2D form and its success in communicating the concept or idea 3.6 Present and store concept realisations or samples in a format which takes account of the need for professional presentation and the work's potential value for future jobs

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 3.1	Interprets textual information from relevant sources to determine and adhere to requirements
Writing	2.1, 3.6	Produces a range of text types using appropriate vocabulary, grammatical structure and referencing conventions
Oral Communication	2.1, 2.2, 2.3, 3.5	- Participates in verbal exchanges using vocabulary, style and tone appropriate to audience - Uses listening techniques to clarify understanding
Numeracy	3.1, 3.3, 3.5	Performs mathematical calculations to produce 2D designs
Get the work done	1.1, 1.2, 2.1-2.4, 3.1-3.4, 3.6	Plans and organises tasks required to achieve required outcomes

		- Identifies ideas in use in other contexts and considers how they might be applied in own context - Selects new ideas that may improve a process in immediate work context - Takes responsibility for routine low-impact decisions within familiar situations - Evaluates effectiveness of decisions on how well they meet stated goals

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBDES302 Explore and apply the creative design process to 2D forms	BSBDES302A Explore and apply the creative design process to 2D forms	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBDES302 Explore and apply the creative design process to 2D forms

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce a range of samples or concept realisations which demonstrate creative thinking techniques and experimentation processes based on available resource materials
- review own work to determine future improvements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify creative thinking techniques that can be used as part of the design process
- describe the elements and principles of design as applied to two-dimensional (2D) forms
- list materials, tools and equipment required for the design of 2D forms in the relevant work context
- describe the notion of individual interpretation and choice within the design process
- explain the particular challenges that may arise in the design of 2D forms.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the design process field of work and include access to the materials, resources and equipment needed to apply design processes to 2D forms.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBDES303 Explore and apply the creative design process to 3D forms

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to explore and creatively apply the design process to the development of three-dimensional (3D) forms.

It applies to individuals who work under supervision and apply an understanding of the design process using discretion and judgement.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Design – Design Process

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Source information on 3D design	1.1 Identify and access relevant sources of information on 3D design 1.2 Evaluate and collate information to build knowledge of 3D design
2 Explore the creative design process for 3D forms	2.1 Use creative thinking techniques to generate a range of ideas and options 2.2 Use experimentation to explore and challenge a range of

ELEMENT	PERFORMANCE CRITERIA
	different ideas 2.3 Challenge assumptions, reflect on ideas and refine approaches 2.4 Consciously change perspective, and evaluate ideas and situations in new ways
3 Communicate concepts or ideas through application of design processes to 3D forms	3.1 Investigate and reflect on how a particular concept or idea might be communicated in 3D form 3.2 Select materials, tools and equipment relevant to the realisation of the concept or idea 3.3 Apply a creative design process to produce a range of 3D concept realisations 3.4 Reflect on own application of design process and success in communicating the concept or idea 3.5 Seek and obtain feedback from others about the 3D form and its success in communicating the concept or idea 3.6 Present and store concept realisations or samples in a format which takes account of the need for professional presentation and the work's potential value for future jobs

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 3.1	Interprets textual information from relevant sources to determine and adhere to requirements
Writing	2.1, 3.6	Produces a range of text types using appropriate vocabulary, grammatical structure and referencing conventions
Oral Communication	2.1-2.3, 3.5	- Participates in verbal exchanges using vocabulary, style and tone appropriate to audience - Uses listening techniques to clarify understanding
Numeracy	3.1, 3.3, 3.5	Performs mathematical calculations required to produce 3D concept designs
Get the work done	1.1, 1.2, 2.1-2.4, 3.1-3.4, 3.6	- Plans and organises tasks required to achieve outcomes - Identifies ideas in use in other contexts and considers

		how they might be applied in own context • Selects and adopts new ideas to improve a process in immediate work context • Takes responsibility for routine low-impact decisions within familiar situations • Evaluates effectiveness of decisions on how well they meet stated goals

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBDES303 Explore and apply the creative design process to 3D forms	BSBDES303A Explore and apply the creative design process to 3D forms	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBDES303 Explore and apply the creative design process to 3D forms

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce a range of samples or concept realisations which demonstrate creative thinking techniques and experimentation processes based on available resource materials for three-dimensional (3D) forms
- review own work to determine future improvements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify creative thinking techniques that can be used as part of the design process
- describe the elements and principles of design as applied to 3D forms
- list materials, tools and equipment required for the design of 3D forms in the relevant work context
- describe the notion of individual interpretation and choice within the design process
- explain the particular challenges and issues in the design of 3D forms
- outline the relationships between form and space.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the design process field of work and include access to the materials, resources and equipment needed to apply design processes to 3D forms.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBDES305 Source and apply information on the history and theory of design

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to source information on design history and theory, and to apply that information in the individual's design work.

It applies to individuals who work in design and need to develop and maintain a general knowledge of design history and theory.

More complex research into design theory and design trends is covered by BSBDES602 Research global design trends and BSBDES801 Research and apply design theory.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Design – Design Process

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Collect information on design history and theory	1.1 Identify and access relevant sources of information on design history and theory 1.2 Organise research material and findings for current or future use in design practice, facilitating easy access and

ELEMENT	PERFORMANCE CRITERIA
	cross-referencing
2 Apply information to own area of work	2.1 Evaluate information in the context of current design practice 2.2 Assess which aspects of information on design history and theory could be used or adapted to inform current practice 2.3 Use relevant information in a culturally appropriate way to develop an understanding of own area of work
3 Update and maintain knowledge of design trends	3.1 Identify and use opportunities to update and expand knowledge of design trends and developments 3.2 Incorporate and integrate knowledge into design activities

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 3.1	Identifies, interprets and evaluates information on historical and current design trends from a range of sources
Writing	1.2, 3.1	- Notes findings and sources of information for design knowledge, trends and developments - Documents information for colleagues and peers as requested
Oral Communication	1.1, 3.1	Asks questions to clarify information, listens to responses and shares ideas with others
Navigate the world of work	2.3	Understands main tasks, responsibilities and boundaries of own role
Get the work done	1.1, 1.2, 2.2, 3.2	- Plans and implements tasks required to achieve required outcomes - Contributes to new approaches within immediate work environment - Takes responsibility for routine low-impact decisions within familiar situations - Follows routine procedures for using digital technology to enter, store and retrieve information

		directly relevant to role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBDES305 Source and apply information on the history and theory of design	BSBDES305A Source and apply information on the history and theory of design	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBDES305 Source and apply information on the history and theory of design

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- show how the history and theory of design can be adapted and used in own professional practice
- maintain currency of theoretical and design knowledge.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise current design trends
- describe the evolution of design
- identify the organisational information practices and their application
- outline sources of information on design history and theory relevant to own design work.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the design process field of work and include access to information sources on design history and theory.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBDES401 Generate design solutions

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to generate design solutions in response to a particular design need.

It applies to individuals who generate concepts and solutions in response to a design challenge in any industry context. The starting point may be an open or closed brief; a spontaneous idea; modification of an existing product, service, process or system; or a point in an ongoing design process.

This unit builds on BSBDES201 Follow a design process, and places greater focus on research, concept generation and collaboration with others as key aspects of the design process.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Design – Design Process

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Define the design challenge	1.1 Determine and evaluate user/client needs 1.2 Clarify specifications, parameters and constraints of the

ELEMENT	PERFORMANCE CRITERIA
	design challenge in consultation with relevant stakeholders 1.3 Articulate essence of the design challenge in an appropriate format
2 Undertake research to inform the design solution	2.1 Source, evaluate and acknowledge information that may assist in responding to the design challenge 2.2 Consider historical, current and future perspectives and trends that might inform design solutions 2.3 Consider relevant social, economic, environmental, ethical and cultural issues that may impact design solutions 2.4 Analyse, distil and collate information to inform the development of the design solution
3 Communicate and collaborate with others	3.1 Establish and develop working relationships with key stakeholders 3.2 Seek and integrate input and ideas from others during design process 3.3 Inform key stakeholders about progress of the design and related implications 3.4 Negotiate and agree on any changed requirements or modifications
4 Generate ideas and responses to the design challenge	4.1 Reflect on and integrate ideas generated from research and consultation 4.2 Use a range of creative thinking techniques to generate different options and ideas 4.3 Apply relevant principles of functionality, ergonomics, aesthetics and sustainability to development of different options
5 Select a design solution	5.1 Develop and use a range of criteria to evaluate different options and ideas 5.2 Select a preferred solution based on agreed criteria and in consultation with relevant key stakeholders 5.3 Adjust and refine proposed design solution based on research, testing and reflection 5.4 Present proposed design solution with appropriate supporting documentation according to project requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 2.4	Researches, collates and analyses textual information from a wide range of sources
Writing	1.2, 1.3, 2.1, 2.4, 5.1, 5.3, 5.4	- Documents ideas, sources and concepts using appropriate formats and specific language - Refines and edits work
Oral Communication	1.2, 1.3, 3.2-3.4, 5.2, 5.4	- Actively participates in verbal exchanges of ideas and elicits views and opinions of others by listening and questioning - Clarifies, explains or presents information relating to design solution using clear and specific language appropriate to audience
Numeracy	1.3, 4.3, 5.1, 5.4	Interprets numeric data and applies mathematical calculations relevant to design solution
Navigate the world of work	2.3	Understands nature and purpose of own role and associated responsibilities and how it contributes to the work of others in immediate work context
Interact with others	1.3, 3.1, 5.4	- Selects the appropriate form, channel and mode of communication for a specific purpose relevant to own role - Cooperates with others as part of familiar routine activities and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.1, 2.1, 2.2, 2.4, 4.1-4.3, 5.1-5.3	- Takes responsibility for planning and implementing tasks required to achieve outcomes, including those times when interaction with others is - Systematically analyses and evaluates information to aid in decision making and problem solving - Applies some basic principles of lateral thinking to generate new or innovative ideas

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBDES401 Generate design solutions	BSBDES401A Generate design solutions	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBDES401 Generate design solutions

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop and document a design solution through research, reflection, and generation and refinement of ideas
- demonstrate effective collaboration with others in the design process.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the elements and principles of design and their application in the relevant design context
- describe key features of the wider industry, and the economic, social and historical context design solutions are being generated in
- discuss design trends and technologies including other designs and the work of other design practitioners in the relevant industry context
- identify sources of information that support the development of technical and other knowledge
- describe the materials, tools, equipment, techniques and processes used in the generation of design solutions in the relevant industry context.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the design process field of work and include access to:

- interaction with others to reflect the collaborative nature of the design process

- sources of information on design for the relevant industry context.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBDES402 Interpret and respond to a design brief

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to interpret and creatively respond to a design brief through the production of work.

It applies to individuals working in any industry or design context where work is prescribed by a commissioning agent/client in a brief. Individuals are required to integrate the creative, communication and planning processes that support effective response to a design brief.

Work is carried out independently, although guidance is available if required.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Design – Design Process

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Interpret design brief	1.1 Correctly interpret the specifications of design brief 1.2 Establish and clarify user or client for the proposed product/service to inform design decisions 1.3 Identify and clarify specifications, parameters or constraints of design brief in consultation with relevant colleagues

ELEMENT	PERFORMANCE CRITERIA
	1.4 Source and evaluate information pertinent to design brief
2 Explore and develop design concept	2.1 Generate ideas for design concept through research, exploration and experimentation 2.2 Develop initial design concept consistent with design brief parameters 2.3 Evaluate and explore options for refining concept to best meet design brief parameters 2.4 Refine options and select approach which best meets design brief requirements
3 Liaise with client	3.1 Agree on communication process and frequency of communication with client 3.2 Present concepts for work at appropriate stages during design process as required 3.3 Present and explore different options and creative ideas with client when appropriate 3.4 Proactively seek and act on client feedback 3.5 Reach agreement on concept for work which complies with design brief
4 Plan production of work	4.1 Assess specific design production risks 4.2 Identify all components required to produce a prototype 4.3 Assess technical requirements for production against specified guidelines 4.4 Identify and consult with support services required for production 4.5 Produce a prototype and evaluate against design brief requirements 4.6 Analyse prototype and determine any further adjustments to production requirements 4.7 Finalise production specifications supported by accurate and complete documentation
5 Complete production of work	5.1 Collect and/or organise required components for the work 5.2 Produce or monitor the production of work ensuring all parameters of design brief are met 5.3 Accurately document work progress in a format appropriate to the nature of the design and requirements of design brief

ELEMENT	PERFORMANCE CRITERIA
	5.4 Seek client approval for work where appropriate

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.4, 2.1, 4.3, 4.5	Analyses textual information to accurately interpret job specifications
Writing	1.3, 3.2-3.5, 4.4, 4.5, 4.7, 5.3, 5.4	Uses specific industry-related terminology and appropriate formats to develop, document and amend workplace documentation
Oral Communication	1.3, 3.1-3.5, 4.4, 5.4	- Actively participates in verbal exchanges of ideas and elicits the views and opinions of others by listening and questioning - Uses clear language to clarify, explain and present information
Numeracy	1.1, 1.3, 4.5, 5.3	Interprets numeric data and applies mathematical calculations to produce prototype according to design specification
Interact with others	1.3, 3.1-3.5, 4.4, 5.4	- Actively identifies the requirements of important communication exchanges, selecting appropriate channels, format, tone and content to suit purpose and audience - Collaborates and negotiates with others to achieve joint outcomes
Get the work done	1.1, 1.2, 2.1-2.4, 3.2, 4.1-4.3, 4.6, 4.7, 5.1, 5.2	- Takes responsibility for planning and implementing tasks required to achieve outcomes, including those times when interaction with others is - Systematically analyses and evaluates information to aid in decision making and problem solving - Applies some basic principles of lateral thinking to generate new or innovative ideas - Understands and explicitly applies some basic principles of lateral thinking to generate new or innovative ideas

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBDES402 Interpret and respond to a design brief	BSBDES402A Interpret and respond to a design brief	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBDES402 Interpret and respond to a design brief

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- articulate and document the process of developing own design practice by learning to develop new skills, ideas and a unique voice
- adjust work processes via peer feedback and self-evaluation
- identify work options and incorporate networking in career development.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list current and emerging designers in the relevant design discipline
- discuss current and emerging trends and technologies in the relevant design discipline, and the opportunities and challenges they represent
- identify professional development information and resources available to designers
- summarise sources of information relating to work opportunities and career planning.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the design process field of work and include access to materials, resources and equipment used in the development of technical and conceptual skills in the relevant design context.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBDES601 Manage design realisation

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manage the process of taking a design from concept to final realisation or production. It has a strong focus on planning, implementation and monitoring skills, combined with a sound knowledge of design and production issues and challenges in a given context.

It applies to individuals working in any industry context or design discipline who take responsibility for turning design concept into reality – a product or service of value to the end-user. This person could be an individual designer-maker or a designer working as part of a larger design/production team.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Design – Design Process

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Plan realisation of design	1.1 Collect, analyse and maintain relevant information on the design 1.2 Discuss and agree on standards of work and monitoring requirements with appropriate stakeholders 1.3 Develop clear plan and schedule for design realisation,

ELEMENT	PERFORMANCE CRITERIA
	including key roles and responsibilities linked to timelines and budget
2 Implement and monitor realisation of design	2.1 Organise and/or allocate resources to achieve realisation of design within required standards, timeframes and budget 2.2 Liaise with others involved in design realisation to ensure obligations and quality standards are met within time, budget and technical resources 2.3 Maintain accurate, relevant and complete documentation in accordance with agreed standards 2.4 Monitor process to ensure integrity of design is maintained at all times, including through the process of challenging and interrogating own design work 2.5 Promptly identify difficulties or problems that arise in relation to realisation of design and take action to rectify situation
3 Liaise and negotiate with stakeholders	3.1 Establish and maintain appropriate communication channels with relevant stakeholders 3.2 Proactively seek and provide information to facilitate effective design realisation 3.3 Adhere to agreed terms and conditions or negotiate appropriate changes in light of changed circumstances 3.4 Negotiate and agree on revisions with relevant parties in a professional manner, to enhance quality of outcome
4 Complete design process	4.1 Finalise design outcomes in accordance with terms and conditions 4.2 Seek feedback from key stakeholders on finished design and make final adjustments as agreed 4.3 Evaluate completed design in relation to own work and overall process, to inform future practice

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description

Reading	1.1, 2.3	Collates and analyses textual information from a range of sources relevant to the design realisation
Writing	2.3, 3.1, 3.2, 4.3	Produces documentation using appropriate structure, language and context to articulate own ideas and positions
Oral Communication	1.2, 3.2-3.4, 4.2	- Articulates clearly using specific language and appropriate tone to convey information - Uses active questioning and listening techniques to confirm understanding
Numeracy	1.3, 2.1	Interprets and uses numeric information in budgets and to determine work schedules
Navigate the world of work	2.3, 3.3, 4.1	- Works independently and collectively within broad parameters, with a strong sense of responsibility and ownership of plans, decisions and outcomes - Adheres to organisational policies and procedures
Interact with others	1.2, 2.2, 3.1, 3.2, 3.4	- Recognises the importance of taking audience, purpose and contextual factors into account when making decisions about what to communicate, with whom, why and how - Fosters a collaborative culture within own sphere of influence, facilitating a sense of cohesion and commitment
Get the work done	1.1, 1.3, 2.1, 2.4, 2.5	- Takes responsibility for planning and organising tasks to meet workplace deadlines, including those tasks that require liaison with other people - Applies formal problem-solving processes when responding to unpredictable issues and challenges that arise during the design process - Uses each experience to reflect on how variables impact outcomes to inform future practices

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBDES601 Manage design realisation	BSBDES601A Manage design realisation	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBDES601 Manage design realisation

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce a design according to all brief requirements
- demonstrate highly-developed interpersonal and negotiation skills to deliver the finished product.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline key responsibilities of relevant personnel in this context
- describe best practices when dealing with setbacks in the production process
- explain production processes in a particular industry context or discipline including required materials, tools and equipment.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the design process field of work and include access to:

- resources, tools, materials and equipment required for realising a design in a specific context
- a design concept that the candidate can take to realisation stage
- other people to reflect the collaborative nature of the work.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBEBU501 Investigate and design e-business solutions

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to evaluate e-business models and strategies, as well as incorporate the results of these evaluations into the design of an e-business solution.

It applies to individuals who possess skills and knowledge in a specialist business area, as well as knowledge of software and other technologies. They apply these skills and knowledge in the evaluation, selection and implementation of new strategies for business, which incorporate e-business solutions. They may be responsible for overseeing these tasks along with technical or other knowledge experts.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Information and Communications Technology – E-Business

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Investigate e-business opportunities	1.1 Undertake a competitive analysis to determine the likely impact new capabilities will have on industry sectors and competitors 1.2 Complete and assess value chain analysis to identify processes

ELEMENT	PERFORMANCE CRITERIA
	and relationships that may benefit from the adoption of e-business solutions 1.3 Identify threats and opportunities to e-business implementation and evaluate potential contributions to the business 1.4 Conduct resource analysis to identify cost and revenue implications in developing opportunities 1.5 Identify and evaluate legal and ethical issues relating to e-business opportunities
2 Evaluate e-business models	2.1 Identify and analyse business-to-business, business-to-consumer, intra-organisational e-business applications and e-business models 2.2 Rank compatible e-business models in terms of their strengths and weaknesses, considering resourcing, technical and security requirements of each 2.3 Assess cost implications of implementation of e-business models 2.4 Determine an e-business model most appropriate in relation to business plan
3 Design an e-business	3.1 Formulate purpose, objectives and values for the e-business 3.2 Identify target market, and value chain structure in accordance with chosen e-business model 3.3 Identify and obtain technical needs and expertise required to implement e-business model 3.4 Investigate and develop plan to address culture change issues to manage transition to an e-business
4 Implement an e-business strategy	4.1 Develop policies and guidelines to support customers, supply chain and staff to ensure successful implementation 4.2 Monitor performance of business goals and adjust policies and procedures to respond to changing needs of customers, staff and supply chain 4.3 Review e-business systems and models, seeking feedback from users and personnel responsible for e-business implementation 4.4 Incorporate evaluation results and feedback to improve future e-business strategies

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.5, 2.1-2.4, 3.2-3.4, 4.1-4.4	Interprets a range of textual information to evaluate opportunities, possible exemplars and technical considerations
Writing	1.1-1.5, 2.1-2.4, 3.1-3.4, 4.1-4.4	Takes personal notes and develops workplace documentation that clarifies complex ideas using language and structure to suit context and audience
Oral Communication	3.3, 4.3	- Articulates information clearly using language and tone appropriate to audience and environment - Uses active listening and questioning techniques to receive feedback and confirm understanding
Numeracy	1.4, 2.2, 2.3	Analyses numerical information to determine resources required for job
Navigate the world of work	1.1-1.5, 2.1-2.4, 3.1-3.4, 4.1-4.4	- Develops and reviews organisational procedures to achieve broader workplace goals - Monitors adherence to organisational procedures and legislative requirements
Interact with others	3.3, 4.3	Selects and uses appropriate conventions and protocols when communicating with others in a range of work contexts
Get the work done	1.5, 2.1-2.4, 3.1-3.4, 4.1-4.4	- Takes responsibility for developing and implementing organisational processes that comply with legislative requirements and achieve required outcomes - Systematically gathers and analyses all relevant information and evaluates options to solve problems or make decisions - Considers the effectiveness of a solution in terms of how well it met stated goals, and seeks to make improvements - Investigates new and innovative ideas as a means to continuously improve work practices and processes - Uses digital technologies and systems safely, legally and ethically to access, store and share information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBEBU501 Investigate and design e-business solutions	BSBEBU501A Investigate and design e-business solutions	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBEBU501 Investigate and design e-business solutions

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- analyse and evaluate e-business opportunities involving new business models and not simply electronic versions of existing businesses
- provide supporting evidence for choice of e-business solution
- implement, monitor and evaluate an e-business solution.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the role of a value chain analysis when assessing potential e-business solutions
- identify relevant legislation, regulations, standards and codes of practice that may affect the implementation of the e-business solution
- list key features of a range of e-business models
- outline the policies and guidelines relating to the implementation of the e-business solution.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the information and communications technology – e-business field of work and include access to:

- office equipment and materials
- documentation relating to analysis and implementation
- relevant legislation, regulations and codes of practice.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBEBU502 Implement e-business solutions

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the performance outcomes, skills and knowledge required to implement e-business solutions, including establishing the initial requirements and developing systems for implementation, and to support ongoing monitoring and review.

It applies to individuals who possess skills and knowledge in a specialist business area, as well as knowledge of software and other technologies. They apply these skills and knowledge in the implementation of e-business solutions. They may be responsible for overseeing these tasks along with technical or other knowledge experts.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Information and Communications Technology – E-Business

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Set up e-business solution	1.1 Identify legislative and organisational requirements in consultation with relevant personnel 1.2 Evaluate security issues and rank them for acceptable risk 1.3 Evaluate the costs and technology requirements associated with e-business solution in relation to organisational requirements 1.4 Confirm technology and standards required for implementation

ELEMENT	PERFORMANCE CRITERIA
	with relevant personnel 1.5 Prepare budget for implementation of solution
2 Implement e-business solution	2.1 Delegate responsibility for solution in accordance with organisational policy, procedures and structures 2.2 Develop procedures for solution in accordance with organisational and other business requirements 2.3 Provide training for implementation of solution in accordance with organisational requirements 2.4 Develop security procedures and protocols in accordance with organisational requirements 2.5 Maintain records relating to solution in accordance with legal, ethical and accounting requirements
3 Monitor and review e-business solution	3.1 Monitor outcomes and processes in accordance with implementation strategy and established performance monitoring and reporting requirements 3.2 Use business data and reports to compare plans, budgets, timelines and forecasts relating to actual performance 3.3 Obtain feedback from users and personnel responsible for implementation, and make recommendations to improve future e-business strategies

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	2.3	Provides training to extend relevant personnel's understanding
Reading	1.2, 1.3, 1.5, 2.1, 3.1-3.3	Interprets a range of textual information to establish job requirements and implement solutions
Writing	1.1-1.5, 2.1-2.5, 3.1-3.3	Takes personal notes and develops workplace documentation that clarifies complex ideas using relevant language and structure appropriate to context and audience

Oral Communication	1.1, 1.4, 2.1, 2.3, 3.3	- Articulates information clearly using language, syntax and tone appropriate to audience and environment - Uses active listening and questioning techniques to receive feedback and confirm understanding
Numeracy	1.3, 1.5, 3.2	Interprets numerical information to evaluate costs and prepare budgets and timelines
Navigate the world of work	1.1, 1.3, 1.4, 2.1-2.5, 3.1	- Develops and reviews organisational procedures to achieve broader workplace goals - Monitors adherence to organisational procedures and legislative requirements
Interact with others	1.1, 1.4, 2.1, 2.3, 3.3	Selects and uses appropriate conventions and protocols when communicating with others in a range of work contexts
Get the work done	1.1-1.5, 2.1, 2.4, 3.1-3.3	- Takes responsibility for developing, implementing and monitoring organisational processes to achieve required outcomes - Plans and implements tasks required to achieve organisational requirements - Systematically gathers and analyses all relevant information and evaluates options to solve problems or make decisions - Considers the effectiveness of a solution in terms of how well it met stated goals, and seeks to make improvements - Identifies digital systems, devices and applications with potential to meet current and/or future needs, including the need for data security

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBEBU502 Implement e-business solutions	BSBEBU502A Implement e-business solutions	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBEBU502 Implement e-business solutions

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- document processes and procedures for implementation of an e-business solution
- develop, implement and review an e-business solution.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- briefly describe the key technology requirements for the e-business solution
- identify key provisions of relevant legislation, regulations, standards and codes of practice that may affect implementation of e-business solutions
- outline organisational policies and procedures relating to the e-business solution.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the information and communications technology – e-business field of work and include access to:

- office equipment and materials
- relevant legislation, regulations and codes of practice.
- documentation to support analysis of organisational requirements for the e-business solution.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBFLM309 Support continuous improvement systems and processes

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to support the organisation's continuous improvement systems and processes. Particular emphasis is on actively encouraging the team to participate in the process, monitoring and reporting on specified outcomes and supporting opportunities for further improvements.

It applies to individuals with roles of responsibility who use initiative, organisational and communication skills to influence the ongoing development of the organisation.

At this level, work will normally be carried out within known routines, methods and procedures, and may also involve complex or non-routine activities that require some discretion and judgement.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Frontline Management

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Contribute to continuous improvement systems and processes	1.1 Actively encourage and support team members to participate in decision-making processes and to assume responsibility and exercise initiative

ELEMENT	PERFORMANCE CRITERIA
	1.2 Communicate the organisation's continuous improvement processes to individuals and teams 1.3 Effectively utilise mentoring and coaching to ensure that individuals/teams are able to support the organisation's continuous improvement processes
2 Monitor and report specified outcomes	2.1 Utilise the organisation's systems and technology to monitor team progress and to identify ways in which planning and operations could be improved 2.2 Apply continuous improvement techniques and processes to improve customer service
3 Support opportunities for further improvement	3.1 Communicate agreed recommendations for improvements in achieving the business plan to team members 3.2 Document and use work performance to identify opportunities for further improvement 3.3 Maintain records, reports and recommendations for improvement within the organisation's systems and processes

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	1.3	Contributes to ongoing organisational improvement by mentoring others to support continuous improvement processes
Reading	2.1, 3.3	Interprets everyday workplace documentation
Writing	1.2, 3.1-3.3	Uses appropriate vocabulary and grammatical structures to achieve precise meaning in a range of documentation
Oral Communication	1.1-1.3, 3.1	- Articulates information in a positive manner using appropriate terminology, tone and style appropriate to context and audience - Uses questioning and listening techniques to exchange and clarify information

Navigate the world of work	1.2, 3.3	- Understands the nature and purpose of own role and associated responsibilities and how own role meshes with others and contributes to broader work goals - Takes responsibility for adherence to organisational processes and systems
Interact with others	1.2, 1.3	Shares information and resources, offers assistance voluntarily and facilitates effective group interactions
Get the work done	2.1, 2.2, 3.2, 3.3	- Takes responsibility for routine low-impact decisions within familiar situations - Evaluates effectiveness of decisions in terms of how well they meet stated goals - Uses a range of digitally based technology and applications to organise, monitor, manage and communicate relevant information effectively

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBFLM309 Support continuous improvement systems and processes	BSBFLM309C Support continuous improvement systems and processes	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBFLM309 Support continuous improvement systems and processes

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- perform actions to support continuous improvement including:
 - using work performance to identify improvement
 - adjusting plans to reflect changes
 - communicating effectively with all stakeholders
 - using technology to monitor operational progress
 - applying suitable recordkeeping processes.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain principles and techniques relating to:
 - continuous improvement systems and processes
 - benchmarking
 - best practice
- describe the benefits of continuous improvement
- list quality approaches which the organisation may implement
- explain methods that can be used in continuous improvement
- outline barriers to continuous improvement
- explain recording, reporting and recommendation processes to facilitate continuous improvement applied within the organisation.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management field of work and include access to:

- relevant workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others
- business technology.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBINN201 Contribute to workplace innovation

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to make a pro-active and positive contribution to workplace innovation.

It applies to individuals working in any industry or community context, in both small and large organisations who take a pro-active approach to identifying, suggesting and developing ideas about better ways of doing things at a practical operational level in a specific area of activity. While the individual's overall work is undertaken with some supervision and guidance, they apply discretion, judgement and effective interpersonal skills in order to contribute to workplace innovation.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Creativity and Innovation – Innovation

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Identify opportunities to do things better	1.1 Be aware of own role in workplace innovation 1.2 Proactively identify opportunities for improvement in own area of work 1.3 Gather and review information which may be relevant to ideas and which might assist in gaining support for ideas

ELEMENT	PERFORMANCE CRITERIA
2 Discuss and develop ideas with others	2.1 Identify people who could provide input into ideas for improvements 2.2 Select the best way of approaching people to begin sharing ideas 2.3 Seek feedback on improvement of ideas, and discuss and develop options and possible variations 2.4 Review and select ideas for follow up based on feedback and further review
3 Address the practicalities of change	3.1 Take action to implement routine changes in consultation with others and within scope of own responsibility 3.2 Identify and articulate issues and practical processes for implementing proposed ideas 3.3 Present ideas and practical suggestions to the appropriate people about how improvements could be made

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 2.4, 3.2	Categorises, interprets and reviews information from a range of sources to generate ideas relevant to the workplace
Writing	3.2, 3.3	Communicates information using clear language and formats appropriate for the audience
Oral Communication	2.3, 3.1, 3.2, 3.3	- Actively participates in verbal exchanges of ideas and elicits the view and opinions of others by listening and questioning - Uses clear and relevant language to clarify workplace issues and promote ideas
Numeracy	1.3, 3.2	Performs basic mathematical calculations to estimate time and cost in relation to implementation of ideas
Navigate the world of work	1.1, 1.2, 3.1	Understands responsibilities of own role
Interact with	2.3, 3.1-3.3	Follows accepted communication practices and protocols when discussing or presenting ideas to others

others		Seeks and takes into account perspectives and opinions of others
Get the work done	1.2, 1.3, 2.1, 2.2, 2.4, 3.1-3.3	- Plans and implements routine tasks making limited decisions and seeking assistance, when necessary - Uses analytical or lateral thinking processes to identify improvements or new ways of approaching tasks - Identifies and anticipates operational problems and develops possible solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBINN201 Contribute to workplace innovation	BSBINN201A Contribute to workplace innovation	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBINN201 Contribute to workplace innovation

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify ideas for improvements and use information from a range of sources including other people to review and select ideas to put forward for implementation
- communicate the ideas and seek input from others in order to identify how the ideas could be implemented
- implement routine changes within scope of responsibility.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the role of individuals in suggesting and making improvements and the importance of pro-active involvement
- list the positive impacts and the challenges of change and innovation
- provide examples of the types of changes that can occur as a result of effective individual participation within own scope of responsibility
- give examples of the types of changes that are within and outside own scope of responsibility
- list typical reasons why suggested improvements or innovations may not be implemented, including operational and management constraints
- explain how to prepare and communicate ideas for improvement to maximise likelihood of support.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the creativity and innovation and include access to:

- workplace documents
- case studies and, where possible, real situations
- office equipment and resources
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBINN301 Promote innovation in a team environment

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to be an effective and proactive member of an innovative team.

It applies to individuals who play a proactive role in demonstrating, encouraging or supporting innovation in a team environment. The individual may be a team participant or a team leader. Teams may be formal or informal and may comprise a range of personnel.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Creativity and Innovation – Innovation

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Create opportunities to maximise innovation within the team	1.1 Evaluate and reflect on what the team needs and wants to achieve 1.2 Check out information about current or potential team members' work in the context of developing a more innovative team 1.3 Bring people into the team or make suggestions for team members based on what needs to be achieved and the potential for cross fertilising ideas

ELEMENT	PERFORMANCE CRITERIA
	1.4 Acknowledge, respect and discuss the different ways that people may contribute to building or enhancing the team
2 Organise and agree effective ways of working	2.1 Jointly establish ground rules for how the team will operate 2.2 Agree and communicate responsibilities in ways that encourage and reinforce team-based innovation 2.3 Agree and share tasks and activities to ensure the best use of skills and abilities within the team 2.4 Plan and schedule activities to allow time for thinking, challenging and collaboration 2.5 Establish personal reward and stimulation as an integral part of the team's way of working
3 Support and guide colleagues	3.1 Model behaviour that supports innovation 3.2 Seek external stimuli and ideas to feed into team activities 3.3 Proactively share information, knowledge and experiences with other team members 3.4 Challenge and test ideas within the team in a positive and collaborative way 3.5 Proactively discuss and explore ideas with other team members on an ongoing basis
4 Reflect on how the team is working	4.1 Debrief and reflect on activities and on opportunities for improvement and innovation 4.2 Gather and use feedback from within and outside the team to generate discussion and debate 4.3 Discuss the challenges of being innovative in a constructive and open way 4.4 Take ideas for improvement, build them into future activities and communicate key issues to relevant colleagues 4.5 Identify, promote and celebrate successes and examples of successful innovation

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 4.2	Interprets and analyses textual information, from a wide range of sources, to identify information relevant to team activities
Writing	2.2, 3.3, 4.4	Uses clear language and formats appropriate for the audience to highlight and present specific information
Oral Communication	1.2, 1.3, 1.4, 2.1, 2.2, 3.5, 4.1, 4.2, 4.3, 4.4, 4.5	- Actively participates in verbal exchanges of ideas and elicits the views and opinions of team members by listening and questioning - Uses clear language to clarify rules and roles relating to team activities in formal and informal situations
Numeracy	1.2, 4.2	Interprets numeric information relevant to team activities
Navigate the world of work	1.1, 3.1, 3.2, 3.5	Understands the nature and purpose of own role and how it affects others in the work context
Interact with others	1.1-1.4, 2.1, 2.2, 3.1, 3.2, 3.4, 3.5, 4.1, 4.2, 4.4, 4.5	- Uses inclusive techniques to initiate, contribute and promote discussion amongst potentially diverse team members - Recognises the importance of establishing and building effective working relationships - Selects the appropriate form, channel and mode of communication for a specific purpose relevant to own role
Get the work done	1.3, 1.4, 2.2, 2.4, 2.5, 3.2, 3.4, 4.2, 4.4, 4.5	- Plans, sequences and prioritises tasks for efficient and effective outcomes - Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking - Uses problem-solving processes to address less predictable problems, and when appropriate, seeking input from others - Reflects on outcomes and further explores own and the team's role in implementing innovation

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBINN301 Promote innovation in a team environment	BSBINN301A Promote innovation in a team environment	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBINN301 Promote innovation in a team environment

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- apply practices that promote innovation within a team including:
 - modelling open and respectful communications
 - contributing to the make-up and rules of the team
 - planning and scheduling of activities
 - reflecting on activities, feedback and challenges to identify improvement options
- encourage others to contribute to innovation in the team
- implement improvements and communicate about them.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain what innovation is, the different types of innovation and the benefits of innovation
- describe the internal and external factors that contribute to a team becoming and remaining innovative including:
 - team characteristics
 - the role of group dynamics and diversity
 - broader environmental factors
- explain how activities can encourage or hinder innovation in a team including:
 - allocation of time and activities
 - modelling behaviour
 - rewards and recognition
 - communications

- feedback.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the creativity and innovation and include access to:

- workplace documents
- case studies and, where possible, real situations
- office equipment and resources
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBIPR401 Use and respect copyright

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to use and respect copyright. It covers maintaining control over the copyright owner's work, commercialising copyright material, preventing the unauthorised use of an original work and using other party's original work legitimately.

It applies to people who may be authors, creators or other owners of works covered by copyright. It also applies to employees who have a role in ensuring that their organisation's copyright is protected and/or that their organisation uses others' copyright appropriately to benefit the organisation without infringing the rights of copyright owners.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Regulation, Licensing and Risk – Intellectual Property

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify extent of copyright protection for original works	1.1 Research copyright and its application to original works 1.2 Identify legislative requirements governing copyright 1.3 Determine the copyright owner of original works within or used by the organisation 1.4 Research the rights of the copyright owner, including moral

ELEMENT	PERFORMANCE CRITERIA
	rights 1.5 Determine whether a copyright notice is required 1.6 Identify sources of information and advice regarding copyright issues and use copyright professionals where required
2. Ensure that copyright protection is effective when using original works	2.1 Identify material within the organisation that may attract copyright 2.2 Identify and review organisation policies and procedures to ensure that own and others' original works are protected against direct or indirect infringement of copyright 2.3 Implement policies and procedures to protect the organisation's copyright, recognising exceptions that allow the legitimate use of own copyright material by others 2.4 Provide advice to relevant personnel about the legal and economic implications of copyright infringement 2.5 Evaluate and make recommendations for the commercialisation potential of copyright material 2.6 Research issues that need to be considered when licensing or selling copyright rights, including the use of copyright collection societies
3. Monitor policies and procedures for use of own copyright materials by other parties	3.1 Monitor policies and procedures to ensure that the organisation's copyright is respected locally and internationally 3.2 Create and maintain documentation in relation to copyright agreements where established 3.3 Implement procedures to limit or deter infringement of organisation's copyright and/or encourage the proper use of the organisation's copyright 3.4 Make recommendations to appropriate personnel when real or potential infringements of organisation's copyright may require further action
4. Monitor policies and procedures for legitimate use of others' copyright materials	4.1 Research when permission is needed to use copyright material belonging to others 4.2 Advise appropriate personnel about restrictions on and licensing requirements for the use of others' copyright material, and implement training if required 4.3 Advise appropriate personnel of legislative exceptions that allow use of copyright material without permission 4.4 Monitor policies and procedures covering organisational use of others' copyright material to ensure it is to the benefit of the

ELEMENT	PERFORMANCE CRITERIA
	organisation 4.5 Monitor organisational use of others' copyright material to reduce the risk of infringement 4.6 Take action to minimise damage if infringement of others' copyright material occurs

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.4, 2.1, 2.2, 2.6, 3.1, 4.1, 4.4	- Researches and analyses complex texts, including legislation, to identify relevant information - Monitors and reviews organisational policies and procedures to ensure compliance with legislative requirements
Writing	1.1, 1.3, 1.4, 2.2, 2.4, 2.5, 2.6, 3.2, 3.4, 4.1, 4.3	- Summarises research findings relevant to the organisation - Records and maintains copyright documentation according to organisational and legislative requirements - Reviews and updates organisational policies and procedures to ensure compliance with legislative requirements
Oral Communication	1.3, 1.6, 2.4, 2.5, 3.4, 4.2, 4.3	- Provides advice using language and terminology appropriate to audience - Obtains information from others by listening and questioning
Navigate the world of work	1.2, 2.2, 2.3, 3.1, 3.3, 4.4	- Identifies and complies with legislative requirements associated with own role - Implements, monitors and reviews policies and procedures to ensure organisational compliance with legislative requirements
Interact with others	1.3, 1.6, 2.4, 2.5, 3.4, 4.2, 4.3	Follows accepted communication practices when seeking or providing advice about intellectual property
Get the work	1.1-1.6, 2.1-2.3, 2.5, 2.6, 3.1-3.4, 4.1,	Plans, organises and implements tasks needed to ensure compliance with organisational and legislative

done	4.4-4.6	requirements • Systematically gathers and analyses information to decide on action needed to prevent or address copyright infringements • Uses digital technologies or tools to access and record information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBIPR401 Use and respect copyright	BSBIPR401 Use and respect copyright	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBIPR401 Use and respect copyright

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- review and interpret information to determine how copyright applies in the organisation
- implement and review organisational policies and procedures to ensure that own and others' original works are protected
- recommend actions to address risks and infringements
- communicate advice or recommendations about copyright to a range of stakeholders
- identify the need for training on copyright and implement training as appropriate.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the legislative framework for copyright and its application to the organisation
- list and describe the types of works that attract copyright
- identify sources of information and advice on copyright
- explain methods to limit or deter unauthorised use of copyright material
- explain direct and indirect infringement
- give examples of action to take if infringement occurs
- give examples of when authorisation for use of copyright material is needed and how to obtain it
- outline different types of licenses and how they apply to the organisation
- outline options for commercialisation of copyright and potential benefits for the organisation.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the regulation, licensing and risk – intellectual property field of work and include access to:

- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBIPR601 Develop and implement strategies for intellectual property management

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to obtain a strategic advantage from developing and implementing strategies for the management of intellectual property. It covers the evaluation of approaches to the management of intellectual property and focuses on establishing, implementing, evaluating and monitoring an organisation's intellectual property strategy.

It applies to directors or managers who take an active role in recognising and securing intangible assets which contribute to the organisation's profitability, productivity and market leadership. These managers and coordinators may work in a range of contexts and may have responsibility for managing people, systems or processes.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Regulation, Licensing and Risk – Intellectual Property

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Evaluate approaches to the management of intellectual property	1.1 Analyse strategic and operational plans to determine intellectual property requirements 1.2 Identify sources of information and advice regarding approaches

ELEMENT	PERFORMANCE CRITERIA
	to the best practice management of intellectual property 1.3 Determine the implications and potential strategic advantage from protection of intellectual property 1.4 Determine the implications and potential strategic advantage from adopting a collaborative approach to intellectual property 1.5 Determine the implications and potential strategic advantage from adopting an open source approach to intellectual property
2 Establish a strategy for managing intellectual property	2.1 Develop an intellectual property strategy for management and use of own and others' intellectual property in line with the organisation's strategic goals or plans 2.2 Examine requirements and options for commercialisation or effective use of intellectual property 2.3 Establish required documentation for the management of the intellectual property strategy 2.4 Develop strategies for addressing intellectual property infringement 2.5 Ensure intellectual property strategy complies with legislative requirements and organisational policies 2.6 Communicate intellectual property strategy to key stakeholders within the organisation and externally
3 Evaluate proposed intellectual property strategy	3.1 Obtain legal and other professional advice regarding the proposed intellectual property management strategy 3.2 Identify and evaluate the benefits from the proposed intellectual property management strategy 3.3 Identify and evaluate the disadvantages, costs and risks of the proposed intellectual property management strategy 3.4 Adjust strategy according to legal advice and evaluation 3.5 Establish, document and present the business case for adopting the proposed intellectual property management strategy to senior management, directors and other key stakeholders
4 Implement and monitor the intellectual property management strategy	4.1 Work with others to ensure the implementation of the strategy 4.2 Monitor and evaluate the strategy and its implementation and report to senior management, directors and other key stakeholders 4.3 Make changes to strategy and its implementation as required

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1-2.3, 2.5, 3.2-3.4, 4.2, 4.3	- Identifies and analyses complex texts to determine legislative, regulatory and business requirements - Evaluates, interprets and uses content obtained from various sources to develop or review strategies
Writing	1.1, 1.2, 2.1, 2.3, 2.4, 2.6, 3.2-3.5, 4.2, 4.3	- Records and summarises information in accordance with organisational or regulatory requirements - Composes and edits texts, selecting appropriate vocabulary, structure and format for audience and purpose - Prepares correspondence and documentation according to organisational formats and protocols
Oral Communication	2.6, 3.5, 4.1, 4.2	- Presents information using language and non-verbal features appropriate to audience - Participates in discussions using listening and questioning to elicit the views of others and to clarify or confirm understanding
Numeracy	3.3, 4.2	Reviews and analyses numerical data embedded in organisational documentation
Navigate the world of work	2.1, 2.5	- Modifies or develops strategies to meet organisational goals, and ethical and legislative requirements - Understands and applies knowledge of legislative and regulatory requirements in the conduct of own work
Interact with others	2.6, 3.5, 4.1, 4.2	- Selects and uses appropriate conventions and protocols when communicating with internal and external stakeholders to seek or share information - Plays a lead role in situations requiring effective collaboration, demonstrating the ability to engage and motivate others to achieve required outcomes
Get the work done	1.1-1.5, 2.1-2.4, 3.1-3.5, 4.2, 4.3	- Takes responsibility for planning, organising, implementing and reviewing processes to ensure effective implementation of intellectual property strategy - Systematically gathers and analyses all relevant information and evaluates options in order to make decisions about intellectual property strategies - Evaluates outcomes of decisions to identify opportunities for improvement

		• Uses analytical and lateral thinking to review current practices and develop new ideas • Uses a range of digital technologies to access, analyse, organise, present and share information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBIPR601 Develop and implement strategies for intellectual property management	BSBIPR601A Develop and implement strategies for intellectual property management	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBIPR601 Develop and implement strategies for intellectual property management

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify and analyse information from a range of sources to determine
 - legislation, regulations and organisational policies and procedures relevant to intellectual property (IP)
 - IP requirements in relation to organisational strategic or operational goals
 - current industry best practice of IP management
 - implications and/or strategic advantage of adopting particular approaches to managing IP
- develop and evaluate a strategy for managing intellectual property that complies with legislative requirements and organisational policies, goals or plans
- develop and present a business case to decision makers
- implement, monitor and evaluate the strategy and its implementation and make improvements as appropriate
- consult and communicate effectively with stakeholders to establish, evaluate or implement the strategy.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe types of intellectual property as they relate to the organisation
- give examples of options for commercialisation of IP
- outline typical barriers to making and implementing strategic decisions about IP and possible strategies to address them
- explain the typical advantages and disadvantages of alternative approaches to managing intellectual property

- identify relevant legislation and regulations relating to the organisation's intellectual property rights and responsibilities
- outline internal and external sources of information and advice relevant to intellectual property.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the regulation, licensing and risk – intellectual property field of work and include access to:

- relevant legislation, standards and codes
- workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBITU306 Design and produce business documents

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to design and produce various business documents and publications. It includes selecting and using a range of functions on a variety of computer applications.

It applies to individuals who possess fundamental skills in computer operations and keyboarding. They may exercise discretion and judgement using appropriate theoretical knowledge of document design and production to provide technical advice and support to a team.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Information and Communications Technology – IT Use

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Select and prepare resources	1.1 Select and use appropriate technology and software applications to produce required business documents 1.2 Select layout and style of publication according to information and organisational requirements 1.3 Ensure document design is consistent with company and/or client requirements, using basic design principles

ELEMENT	PERFORMANCE CRITERIA
	1.4 Discuss and clarify format and style with person requesting document/publication
2. Design document	2.1 Identify, open and generate files and records according to task and organisational requirements 2.2 Design document to ensure efficient entry of information and to maximise presentation and appearance of information 2.3 Use a range of functions to ensure consistency of design and layout 2.4 Operate input devices within designated requirements
3. Produce document	3.1 Complete document production within designated timelines according to organisational requirements 3.2 Check document produced to ensure it meets task requirements for style and layout 3.3 Store document appropriately and save document to avoid loss of data 3.4 Use manuals, training booklets and/or help-desks to overcome basic difficulties with document design and production
4. Finalise document	4.1 Proofread document for readability, accuracy and consistency of language, style and layout prior to final output 4.2 Make any modifications to document to meet requirements 4.3 Name and store document in accordance with organisational requirements and exit application without data loss/damage 4.4 Print and present document according to requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.1, 2.2, 3.2, 3.4, 4.1	- Recognises and interprets textual information from a range of sources to determine and adhere to requirements - Applies strategies to self-correct and verify clarity and conformity of information

Writing	2.2, 2.3, 3.1, 4.2, 4.3	- Develops documents using required format, accurate spelling and grammar and terminology specific to requirements - Organises content to support purposes and audience of material, using clear and logical language
Oral Communication	1.4	Confirms requirements with relevant personnel using specific terminology and listening and questioning techniques
Navigate the world of work	1.2, 1.3, 2.1, 2.4, 3.1, 3.2, 4.2-4.4	Recognises and follows explicit and implicit protocols and meets expectations associated with own role
Interact with others	1.4	Selects and uses appropriate conventions and protocols when communicating in a range of familiar work contexts
Get the work done	1.1-1.3, 2.1-2.4, 3.1-3.4, 4.1-4.4	Uses basic features and functions within applications to access, store, organise data and perform routine work tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBITU306 Design and produce business documents	BSBITU306A Design and produce business documents	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBITU306 Design and produce business documents

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- select appropriate technology and software for design and production of business documents
- adhere to organisational requirements when:
 - selecting layout and style
 - opening and generating files
 - producing documents within designated timelines
 - naming and storing documents
 - printing and presenting documents
- adhere to task requirements when producing documents including:
 - applying basic design principles
 - applying consistent formatting
 - using appropriate styles
 - using correct layouts
 - proofreading as required
- use appropriate data storage options
- apply knowledge of functions and features of contemporary computer applications
- print and present completed documents.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify appropriate technology for production requirements

- describe functions and features of contemporary computer applications
- outline organisational policies, plans and procedures
- list organisational requirements for document design e.g. style guide.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the information and communications technology – IT use field of work and include access to:

- office equipment and resources
- relevant software applications
- examples of style guides
- organisational procedures.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBLDR403 Lead team effectiveness

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit defines skills, knowledge and outcomes required to plan and supervise the performance of the team and develop team cohesion.

It applies team leaders, supervisors and new emerging managers who have an important leadership role in the development of efficient and effective work teams.

Leaders at this level also provide leadership for the team and bridge the gap between the management of the organisation and the team members. As such they must 'manage up' as well as manage their team/s.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership - Leadership

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan to achieve team outcomes	1.1 Lead the team to identify, establish and document team purpose, roles, responsibilities, goals, plans and objectives in consultation with team members 1.2 Engage team members to incorporate innovation and

ELEMENT	PERFORMANCE CRITERIA
	productivity measures in work plans 1.3 Lead and support team members in meeting expected outcomes
2. Lead team to develop cohesion	2.1 Provide opportunities for input of team members into planning, decision making and operational aspects of work team 2.2 Encourage and support team members to take responsibility for own work and to assist each other in undertaking required roles and responsibilities 2.3 Provide feedback to team members to encourage, value and reward individual and team efforts and contributions 2.4 Recognise and address issues, concerns and problems identified by team members or refer to relevant persons as required 2.5 Model expected behaviours and approaches
3. Participate in and facilitate work team	3.1 Actively encourage team members to participate in and take responsibility for team activities and communication processes 3.2 Give the team support to identify and resolve problems which impede its performance 3.3 Ensure own contribution to work team serves as a role model for others and enhances the organisation's image within the work team, the organisation and with clients/customers
4. Liaise with management	4.1 Maintain open communication with line manager/management at all times 4.2 Communicate information from line manager/management to the team 4.3 Communicate unresolved issues, concerns and problems raised by the team/team members to line manager/management and ensure follow-up action is taken 4.4 Communicate unresolved issues, concerns and problems related to the team/team members raised by line managers/management to the team and ensure follow-up to action is taken

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance	Description

	Criteria	
Writing	1.1, 4.2	Prepares workplace plans that communicate intent and elicits feedback clearly and effectively
Oral communication	1.1, 1.3, 2.2, 2.3, 3.1, 3.2, 4.2-4.4	Engages in discussions or provides information using structure and language appropriate to the audience and situation
Interact with others	1.1-1.3, 2.1-2.5, 3.1, 3.3, 4.1	- Selects and uses appropriate conventions and protocols when communicating with team members - Adapts personal communication style to model required behaviours, build trust and positive working relationships and to show respect for the opinions and values of others - Plays a lead role in situations requiring effective collaboration, demonstrating conflict resolution skills and ability to engage and motivate others
Get the work done	1.1-1.3, 3.2	- Develops, implements and monitors plans and processes to ensure team engagement and effectiveness - Uses formal analytical thinking techniques to identify issues and generate possible solutions, seeking input from others as required

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBLDR403 Lead team effectiveness	BSBWOR402A Promote team effectiveness	Updated to meet Standards for Training Packages Title change Minor edits to clarify intent of performance criteria	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBLDR403 Lead team effectiveness

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- apply knowledge of organisational goals, objectives and plans
- develop a team work plan including documentation of how it was generated and how it will be monitored
- identify and incorporate innovation and productivity measures into a team work plan
- communicate with team members and management to identify and establish the team purpose, roles, responsibilities, goals plans and objectives and resolve problems
- use techniques to consult, encourage, support and provide feedback to team members
- model team leadership behaviours and approaches
- liaise with management to develop the teamwork plan, resolve issues and ensure follow-up action is taken.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must explain principles and techniques associated with:

- delegation and work allocation
- goal setting
- group dynamics and processes
- individual behaviour and difference
- leadership styles
- motivation
- negotiation
- problem solving
- planning

- workplace innovation
- workplace productivity.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership field of work and include access to:

- information about the organisation, including organisational structure, goals, objectives and plans
- case studies, and where possible, real situations
- workplace equipment and resources
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMGT402 Implement operational plan

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to implement the operational plan by monitoring and adjusting operational performance, planning and acquiring resources and providing reports on performance as required.

It applies to individuals who plan activities to achieve the measurable, stated objectives of the team and the organisation. At this level work will normally be carried out within routine and non-routine methods and procedures which require planning, evaluation, leadership and guidance of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Management

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Implement operational plan	1.1 Collate, analyse and organise details of resource requirements in consultation with relevant personnel, colleagues and specialist resource managers 1.2 Implement operational plans to contribute to the achievement of organisation's performance/business plan 1.3 Identify and use key performance indicators (KPIs) to monitor

ELEMENT	PERFORMANCE CRITERIA
	operational performance 1.4 Manage contingencies by adjusting the implementation of the operational plan in consultation with others 1.5 Provide assistance in the development and presentation of proposals for resource requirements in line with operational planning processes
2. Implement resource acquisition	2.1 Recruit and induct employees within organisation's policies, practices and procedures 2.2 Implement plans for acquisition of physical resources and services within organisation's policies, practices and procedures and in consultation with relevant personnel
3. Monitor operational performance	3.1 Monitor performance systems and processes to assess progress in achieving profit/productivity plans and targets 3.2 Analyse and use budget and actual financial information to monitor profit/productivity performance 3.3 Identify unsatisfactory performance and take prompt action to rectify the situation according to organisational policies 3.4 Provide mentoring, coaching and supervision to support individuals and teams to use resources effectively, economically and safely 3.5 Present recommendations for variation to operational plans to the designated persons/groups and gain approval 3.6 Implement systems, procedures and records associated with performance in accordance with organisation's requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	3.4	Actively reinforces learning by applying new knowledge and skills in mentoring, coaching and supervising others
Reading	1.1-1.5, 2.1, 2.2, 3.1, 3.2, 3.6	Identifies, interprets, analyses and reviews textual information related to the operational plan and

		monitoring of operational performance
Writing	1.1-1.5, 2.1, 2.2, 3.2-3.6	- Communicates relationships between ideas and information, matching style of writing to purpose and audience - Researches, plans and prepares workplace documentation for relevant stakeholders using organisational formats
Oral Communication	1.1, 1.4, 1.5, 2.1, 2.2, 3.3, 3.4, 3.5	Participates in a variety of spoken exchanges with a range of audiences varying structure and language to suit the audience
Numeracy	1.1, 1.2, 1.3, 1.4, 1.5, 2.2, 3.1, 3.2, 3.3	Selects and uses familiar mathematical techniques to organise timely supply of adequate resources for the operational plan and to use budgetary information to monitor performance
Navigate the world of work	1.5, 2.1, 2.2, 3.3, 3.4, 3.6	Monitors adherence to organisational policies and procedures and considers own role in terms of its contribution to broader goals of the work environment
Interact with others	1.1, 1.4, 1.5, 2.1, 2.2, 3.3, 3.4, 3.5	- Selects and uses appropriate conventions and protocols when communicating with diverse individuals to build rapport, seek or present information - Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective group communication, influencing direction and taking a leadership role on occasion
Get the work done	1.1, 1.2, 1.3, 1.4, 1.5, 2.2, 3.1, 3.2, 3.3, 3.6	- Takes responsibility for planning, organising, implementing and monitoring tasks required to achieve required outcomes - Uses systematic, analytical processes in complex, non-routine situations, setting goals, gathering relevant information and identifying and evaluating options against agreed criteria - Evaluates effectiveness of decisions in terms of how well they met stated goals - Recognises and addresses an increasing range of familiar problems by implementing contingency plans

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMGT402 Implement	BSBMGT402A Implement	Updated to meet Standards for	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
operational plan	operational plan	Training Packages. Edits to clarify intent of Performance Criteria.	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMGT402 Implement operational plan

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- interact with a range of people/groups to identify resource requirements, performance objectives, systems, procedures and records relating to the operational plan
- vary the operational plan and gain approval to deal with contingencies
- monitor operational performance against the performance objectives and budgets and take action to rectify unsatisfactory performance
- plan and acquire physical and human resources using organisation's systems and procedures
- manage and support personnel to achieve performance objectives. including inducting new employees and providing mentoring and coaching
- present information and recommendations to support implementation and variation of the operational plan
- document and provide reports on performance as required by the organisation.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe performance monitoring systems and processes
- describe methods for problem solving
- explain how organisational policies and procedures relate to the operational plan.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership field of work and include access to:

- organisational operational plans, policies and procedures
- workplace documentation and resources including budgets, physical and human resource procurement documentation, employee induction and performance monitoring procedures
- case studies and, where possible, real situations.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMGT403 Implement continuous improvement

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to implement the organisation's continuous improvement systems and processes. It covers using systems and strategies to actively encourage the team to participate in the process, monitoring and reviewing performance, and identifying opportunities for further improvements.

It applies to managers who have an active role in implementing the continuous improvement process to achieve the organisation's objectives. Their position is closely associated with the creation and delivery of products and services which means that they have an important role in influencing the ongoing development of the organisation.

At this level, work will normally be carried out within routine and non-routine methods and procedures, which require planning, evaluation, leadership and guidance of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Management

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Implement continuous improvement systems and	1.1 Implement systems to ensure that individuals and teams are actively encouraged and supported to participate in decision

ELEMENT	PERFORMANCE CRITERIA
processes	making processes, assume responsibility and exercise initiative 1.2 Communicate the organisation's continuous improvement processes to individuals and teams, and obtain feedback 1.3 Ensure effective mentoring and coaching allows individuals and teams to implement the organisation's continuous improvement processes
2. Monitor and review performance	2.1 Use the organisation's systems and technology to monitor and review progress and to identify ways in which planning and operations could be improved 2.2 Improve customer service through continuous improvement techniques and processes 2.3 Formulate and communicate recommendations for adjustments to those who have a role in their development and implementation
3. Provide opportunities for further improvement	3.1 Implement processes to ensure that team members are informed of savings and productivity/service improvements in achieving the business plan 3.2 Document work performance to aid the identification of further opportunities for improvement 3.3 Manage records, reports and recommendations for improvement within the organisation's systems and processes

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 3.2, 3.3	Evaluates and integrates facts and ideas to construct meaning from a range of text types in an effort to implement continuous improvement systems and processes
Writing	1.1, 1.2, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3	- Selects vocabulary, grammatical structures and conventions appropriate to text - Researches, plans and prepares continuous improvement documentation for relevant stakeholders
Oral	1.2, 1.3, 2.3	Participates in a variety of spoken exchanges with a range of audiences using structure and language to suit

Communication		the audience
Navigate the world of work	2.1	Monitors adherence to organisational policies and procedures and considers own role in terms of its contribution to broader goals of the work environment
Interact the work of others	1.2, 1.3, 2.3, 3.1	- Selects and uses appropriate conventions and protocols when communicating with diverse individuals to seek or share information - Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective group communication, influencing direction and taking a leadership role on occasion
Get the work done	1.1, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3	- Takes responsibility for planning and organising own workload to achieve required outcomes - Uses systematic, analytical processes in complex, non-routine situations, setting goals, gathering relevant information and identifying and evaluating options against agreed criteria - Evaluates effectiveness of decisions in terms of how well they meet stated goals - Uses digital applications to access and filter data, extract, organise, integrate and share relevant information - Recognises the potential of new approaches to enhance work practices and outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMGT403 Implement continuous improvement	BSBMGT403A Implement continuous improvement	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMGT403 Implement continuous improvement

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- implement continuous improvement systems and provide mentoring and coaching support to enable individuals and teams to participate in decisions, take responsibility, show initiative and implement improvement processes
- implement processes to inform team members about savings and productivity/service improvements achievements
- communicate effectively to support the continuous improvement system and implementation of improvements
- apply continuous improvement to customer services including internal and external customers
- implement, monitor and adjust improvement plans, processes and procedures to improve performance
- document performance to identify further opportunities for improvement
- manage records and reports within the organisation's systems and procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- give examples of continuous improvement processes
- list typical areas of need for coaching and mentoring to support continuous improvement
- explain how change management techniques can support continuous improvement and initiative
- identify the organisation's systems and data that can be used for benchmarking and monitoring performance for continuous improvement.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership field of work and include access to:

- relevant workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMGT407 Apply digital solutions to work processes

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit defines the skills, knowledge and outcomes to integrate digital technologies into common management practice.

It applies to supervisors, team, new and emerging leaders who need to apply digital vision and solutions within structured work environments.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership - Management

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Utilise digital workplace information	1.1 Identify available workplace digital applications for communications, technologies and networks 1.2 Locate and use digital information as an integral part of workplace operations 1.3 Review digital information sources for validity and reliability 1.4 Create, store and retrieve information in digital format 1.5 Continuously review trends and innovations in relevant digital technology suitable for workplace innovation

ELEMENT	PERFORMANCE CRITERIA
2. Lead work processes in a digital environment	2.1 Select, integrate and use digital services in workplace operations 2.2 Review and select digital solutions that are fit for purpose 2.3 Integrate new digital innovations into workplace operations 2.4 Identify and adopt digital media protocols and conventions 2.5 Train, encourage and support team members in the application of digital solutions
3. Recognise and apply intellectual property requirements	3.1 Identify legislation, regulations and the organisation's policy relevant to intellectual property 3.2 Review digital process and applications for compliance with intellectual property requirements 3.3 Document, register and report matters related to intellectual property

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3	Sources, analyses and interprets textual information, including technical data, in the context of organisational strategy and compliance requirements
Writing	3.3	Develops texts dealing with complex concepts using specialised and detailed language to convey explicit information, requirements and recommendations in accordance with legal and organisational requirements
Oral communication	2.5	Presents information using language and features appropriate to the audience
Navigate the world of work	2.4, 3.1-3.3	Monitors adherence to organisational policies and legal requirements
Interact with others	2.5	Uses a collaborative instructional approach to encourage, support and develop understanding and skills in others
Get the work	1.2, 1.4, 1.5, 2.1- 2.4	Uses and investigates new digital technologies and

done		applications to support organisational plans • Supports the implementation and review of digital technologies

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMGT407 Apply digital solutions to work processes	Not applicable	New unit	No equivalent qualification

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMGT407 Apply digital solutions to work processes

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify digital applications, services and information and evaluate them for use in the workplace including:
 - the validity and reliability of digital information
 - monitoring trends and innovations in digital technology
 - selecting digital services and solutions suitable for the workplace
 - compliance to relevant legislation, regulations and organisational policies
- identify and implement protocols and procedures to integrate digital services and solutions including:
 - intellectual property requirements
 - digital media protocols and conventions
 - storage and retrieval of digital information
 - training and/or mentoring or other support for team members.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain how legislation, regulations and the organisation's policies and procedures relate to working with digital technology and information
- explain key elements to consider when evaluating whether digital technology and information options are fit for purpose
- outline the intellectual property risks to the organisation in relation to digital technology.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership field of work and include access to:

- relevant legislation and regulations
- office equipment and technology
- relevant workplace documentation and resources
- case studies and, where possible, real situations.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMGT516 Facilitate continuous improvement

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to lead and manage continuous improvement systems and processes. Particular emphasis is on the development of systems and the analysis of information to monitor and adjust performance strategies, and to manage opportunities for further improvements.

It applies to individuals who take an active role in managing a continuous improvement process in order to achieve an organisation's objectives.

At this level, work will normally be carried out using complex and diverse methods and procedures which require the exercise of considerable discretion and judgement, using a range of problem-solving and decision-making strategies.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and leadership – Management

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Lead continuous improvement systems and processes	1.1 Develop strategies to ensure that team members are actively encouraged and supported to participate in decision-making processes, assume responsibility and exercise initiative as

ELEMENT	PERFORMANCE CRITERIA
	appropriate 1.2 Establish systems to ensure that the organisation's continuous improvement processes are communicated to stakeholders 1.3 Ensure that change and improvement processes meet sustainability requirements 1.4 Develop effective mentoring and coaching processes to ensure that individuals and teams are able to implement and support the organisation's continuous improvement processes 1.5 Ensure that insights and experiences from business activities are captured and accessible through knowledge management systems
2. Monitor and adjust performance strategies	2.1 Develop strategies to ensure that systems and processes are used to monitor operational progress and to identify ways in which planning and operations could be improved 2.2 Adjust and communicate strategies to stakeholders according to organisational procedures
3. Manage opportunities for further improvement	3.1 Establish processes to ensure that team members are informed of outcomes of continuous improvement efforts 3.2 Ensure processes include recording of work team performance to assist in identifying further opportunities for improvement 3.3 Consider areas identified for further improvement when undertaking future planning

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 3.3	- Identifies and extracts relevant information from a range of complex texts - Locates, interprets and analyses workplace documentation to gather information relating to continuous improvement
Writing	1.1, 1.2, 1.4, 1.5, 2.1, 2.2, 3.1-3.3	Develops complex texts related to continuous improvement processes according to organisational requirements

		Ensures the vocabulary, grammatical structures and conventions are appropriate for the context and target audience
Oral Communication	1.1, 1.2, 1.4, 2.2	- Presents information to a range of audiences using appropriate structure and language - Listens and comprehends information from a variety of spoken exchanges with clients, co-workers and other stakeholders - Confirms understanding through questioning and active listening
Navigate the world of work	1.1-1.3, 2.1, 2.2	- Develops strategies to enable compliance with legislative requirements and achievement of the organisation's goals - Monitors adherence to organisational policies, procedures and protocols and considers own role in terms of its contribution to broader goals of the work environment
Interact with others	1.1, 1.2, 1.4, 2.2	- Identifies and uses appropriate conventions and protocols when communicating with colleagues and external stakeholders - Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective group interaction and influencing direction
Get the work done	1.1, 1.2, 1.4, 1.5, 2.1, 3.1, 3.2, 3.3	- Takes responsibility for developing, implementing and monitoring systems and processes to achieve organisational outcomes - Uses analytical and lateral thinking to review current practices and develop ideas for improvement - Reflects on the ways in which digital systems and tools are used, or could be used, to achieve work goals

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMGT516 Facilitate continuous improvement	BSBMGT516C Facilitate continuous improvement	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMGT516 Facilitate continuous improvement

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to establish systems and processes for continuous improvement that:

- facilitate effective contributions to and communications about continuous improvement processes and outcomes
- address sustainability requirements
- incorporate mentoring, coaching and other support to enable people to participate effectively in continuous improvement processes
- capture insights, experiences and ideas for improvements and incorporate them into the organisation's knowledge management systems and future planning.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain how systems and procedures can support effective continuous improvement
- explain how continuous improvement systems and processes relate to other business systems and requirements including, knowledge management, quality, performance management and sustainability.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership field of work and include access to:

- relevant workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMGT517 Manage operational plan

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to develop and monitor implementation of the operational plan to provide efficient and effective workplace practices within the organisation's productivity and profitability plans.

Management at a strategic level requires systems and procedures to be developed and implemented to facilitate the organisation's operational plan.

This unit applies to individuals who manage the work of others and operate within the parameters of a broader strategic and/or business plan.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Management

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Develop operational plan	1.1 Research, analyse and document resource requirements and develop an operational plan in consultation with relevant personnel, colleagues and specialist resource managers 1.2 Develop and/or implement consultation processes as an

ELEMENT	PERFORMANCE CRITERIA
	integral part of the operational planning process 1.3 Ensure the operational plan includes key performance indicators to measure organisational performance 1.4 Develop and implement contingency plans for the operational plan 1.5 Ensure the development and presentation of proposals for resource requirements is supported by a variety of information sources and seek specialist advice as required 1.6 Obtain approval for the plan from relevant parties and explain the plan to relevant work teams
2. Plan and manage resource acquisition	2.1 Develop and implement strategies to ensure that employees are recruited and/or inducted within the organisation's human resources management policies, practices and procedures 2.2 Develop and implement strategies to ensure that physical resources and services are acquired in accordance with the organisation's policies, practices and procedures 2.3 Recognise and incorporate requirements for intellectual property rights and responsibilities in recruitment and acquisition of resources and services
3. Monitor and review operational performance	3.1 Develop, monitor and review performance systems and processes to assess progress in achieving profit and productivity plans and targets 3.2 Analyse and interpret budget and actual financial information to monitor and review profit and productivity performance 3.3 Identify areas of under-performance, recommend solutions and take prompt action to rectify the situation 3.4 Plan and implement systems to ensure that mentoring and coaching are provided to support individuals and teams to effectively, economically and safely use resources 3.5 Negotiate recommendations for variations to operational plans and gain approval from designated persons/groups 3.6 Develop and implement systems to ensure that procedures and records associated with documenting performance are managed in accordance with organisational requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.5, 2.1, 2.2, 3.1, 3.2, 3.3, 3.4, 3.6	- Identifies and extracts relevant information from a range of complex texts - Gathers, interprets and analyses workplace documentation to determine requirements for the operational plan
Writing	1.1-1.5, 2.1, 2.2, 3.1-3.6	- Develops and documents a range of detailed texts relating to the management of an operational plan according to organisational requirements - Ensures the vocabulary, grammatical structures and conventions are appropriate for the context and target audience
Oral Communication	1.1, 1.2, 1.5, 1.6, 3.4, 3.5	- Presents information to a range of audiences using appropriate register, vocabulary and paralinguistic features - Listens and comprehends information from a variety of spoken exchanges with clients, co-workers and other stakeholders - Confirms understanding through questioning and active listening
Numeracy	1.1, 1.3, 1.4, 3.1-3.4	Selects and uses mathematical problem-solving strategies to organise resource requirements, performance benchmarks and financial viability of the operational plan
Navigate the world of work	2.1, 2.2, 3.4, 3.6	- Monitors adherence to organisational policies, procedures and considers own role in terms of its contribution to broader goals of the work environment - Appreciates the implications of legal responsibilities with specific reference to health and safety
Interact with others	1.1, 1.2, 1.5, 1.6, 3.5	- Identifies and uses appropriate conventions and protocols when communicating with colleagues and external stakeholders - Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective group interaction, influencing direction and taking a leadership role on occasion
Get the work done	1.1-1.5, 2.1, 2.2, 3.1, 3.3, 3.4, 3.6	Takes responsibility for developing and implementing systems and processes to achieve organisational objectives, seeking advice, feedback and support as

		required to assist in the development and planning phase • Sequences and schedules complex activities, monitors implementation, and manages relevant communication • Uses systematic analytical processes to aid decision making, identify potential problems and generate contingency plans or solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMGT517 Manage operational plan	BSBMGT515A Manage operational plan	Updated to meet Standards for Training Packages. Edits to clarify intent of Performance Criteria. Additional performance criterion and evidence for intellectual property.	No equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMGT517 Manage operational plan

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop and implement an operational plan using a variety of information sources and consultation (including using specialist advice if required) which includes:
 - resource requirements
 - key performance indicators
 - monitoring processes
 - contingency plans
- communicate effectively with relevant stakeholders to explain the plan and supporting information, seek approvals, negotiate variations and engage work teams
- develop and implement strategies to achieve the operational plan within the organisation's policies, practices and procedures including:
 - recruiting, inducting and developing personnel
 - acquiring physical resources and services
 - protecting intellectual property
 - making variations to the plan
 - monitoring and documenting performance.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe models and methods for operational plans
- explain the role of an operational plan in achieving the organisation's objectives
- explain budgeting processes

- list alternative approaches to developing key performance indicators to meet business objectives
- outline the legislative and regulatory context relevant to the operational plan of the organisation
- outline the organisation's policies, practices and procedures that directly relate to the operational plan.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership field of work and include access to:

- relevant legislation and regulations
- workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMGT519 Incorporate digital solutions into plans and practices

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit defines the skills, knowledge and outcomes required to implement digital solutions into organisational processes and practices. It covers identifying and evaluating opportunities, accessing technological expertise, and managing the changes associated with new technology.

It applies to leaders and managers where the application of digital solutions can improve workplace innovation and productivity.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership - Management

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify trends in digital applications	1.1 Review digital applications and developments and related regulatory requirements relevant to the work context and industry 1.2 Consult with technology experts to identify suitable applications 1.3 Undertake cost-benefit analysis to qualify suitability of new or improved digital applications

ELEMENT	PERFORMANCE CRITERIA
	1.4 Document risks, opportunities and barriers to implementation
2. Evaluate opportunities for new digital applications	2.1 Select and review processes, plans and practices to identify potential to integrate new digital solutions 2.2 Consult with others in the enterprise to identify flow on impacts 2.3 Work with technology specialists and others to identify proven intervention methods 2.4 Trial and evaluate proposed changes in line with enterprise risk policy and select options to progress
3. Implement digital solutions	3.1 Prepare new or revised procedure and process documentation 3.2 Prepare change plan and train personnel 3.3 Regularly monitor and adjust new applications as needed 3.4 Maintain data on new or revised practices
4. Evaluate solutions	4.1 Analyse implementation data to identify trends 4.2 Compare findings against expected benefits and productivity improvements 4.3 Document and recommend additional digital applications relevant to the workplace and industry

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 4.1, 4.2	Sources, analyses and interprets textual information, including technical data, in the context of organisational strategy and compliance requirements to make comparisons and identify trends
Writing	1.4, 3.1, 3.2, 4.3	Develops texts dealing with complex concepts using specialised and detailed language to convey explicit information, requirements and recommendations in accordance with organisational requirements
Oral Communication	1.2, 2.2, 2.3, 3.2	Presents information and seeks advice using language and features appropriate to audience

Numeracy	1.3	Selects and uses familiar mathematical techniques to calculate costs and to conduct cost benefit analyses
Navigate the world of work	1.1, 2.4, 3.1, 3.3	Understands and adheres to legislative requirements and contributes to the development of organisational policy
Interact with others	1.2, 2.2, 2.3, 3.2	Cooperates and consults with others to identify options to support strategy
Get the work done	1.1, 1.3, 2.1, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3	- Plans and implements tasks required to implement digital solutions - Collects and analyses data to decide on effectiveness of practices and to determine risk - Actively identifies digital systems, devices and applications with potential to meet current and/or future needs

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMGT519 Incorporate digital solutions into plans and practices	Not applicable	New unit	No equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMGT519 Incorporate digital solutions into plans and practices

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- evaluate digital applications to determine costs, benefits, risks and suitability for the work context
- consult with technology subject matter experts on digital applications and implementation
- consult with stakeholders to plan for and implement changes
- manage implementation of the changes including:
 - trialling and evaluation of options
 - preparing a change plan
 - new or revised procedures and documentation
 - providing training
 - monitoring and making adjustments as needed
 - managing the flow on impacts of the changes
- monitor and evaluate new digital work practices against expected benefits and productivity improvements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe current trends and practices in digital applications relevant to the work context and industry
- outline the legislative and regulatory context of the organisation as it relates to digital solutions
- explain the convergence between information technology and telecommunications applications in the relevant industry

- explain how other systems, policies and procedures in an organisation are likely to be affected by new digital applications
- outline typical challenges to implementing technology changes in an organisation and possible strategies to address them
- describe methods for evaluating success of digital applications.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership field of work and include access to:

- relevant legislation and regulations
- workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMGT608 Manage innovation and continuous improvement

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to sustain and develop an environment in which continuous improvement, innovation and learning are promoted and rewarded.

It applies to people with managerial responsibilities who aim to build a better and more effective work environment. Continuous improvement and innovation have links with the model of the learning organisation and people working at this level play an important role in building the culture, values and attitudes of the organisation.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Management

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Review programs, systems and processes	1.1 Establish strategies to monitor and evaluate performance and sustainability of key systems and processes 1.2 Undertake detailed analyses of supply chains, and operational, product and service delivery systems 1.3 Identify performance measures, and assessment tools and techniques, and evaluate their effectiveness 1.4 Analyse performance reports and variance from plans for key

ELEMENT	PERFORMANCE CRITERIA
	result areas of the organisation 1.5 Identify and analyse changing trends and opportunities relevant to the organisation 1.6 Seek advice from specialists, where appropriate, to identify technology and electronic commerce opportunities
2. Develop options for continuous improvement	2.1 Brief groups on performance improvement strategies and innovation as an essential element of competition 2.2 Foster creative climate and organisational learning by promoting interaction within and between work groups 2.3 Encourage, test and recognise new ideas and entrepreneurial behaviour where successful 2.4 Accept failure of an idea during trialling and recognise, celebrate and embed success into systems 2.5 Undertake risk management and cost-benefit analysis for each option or idea approved for trial 2.6 Approve innovations through agreed organisational processes
3. Implement innovative processes	3.1 Promote continuous improvement and sustainability as essential to doing business 3.2 Address the impact of change and consequences for people and implement transition plans 3.3 Ensure objectives, timeframes, measures and communication plans are in place to manage implementation 3.4 Implement contingency plans in the event of non-performance 3.5 Follow up failure by prompt investigation and analysis of causes and manage emerging challenges and opportunities effectively 3.6 Ensure that learnings from activities are captured and managed to inform future work 3.7 Regularly evaluate continuous improvement systems and processes 3.8 Communicate costs and benefits of innovations and improvements to relevant groups and individuals

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	3.6	Plans and implements strategies to review and improve own performance
Reading	1.1-1.5, 2.5, 2.6, 3.2-3.5, 3.7	Analyses, evaluates and integrates facts and ideas to construct meaning from a range of text types
Writing	1.1-1.5, 2.1, 2.5, 3.2, 3.3, 3.5, 3.6, 3.7, 3.8	- Integrates information and ideas from a range of sources, utilising appropriate support materials - Communicates complex relationships between ideas and information, matching style of writing to purpose and audience
Oral Communication	1.6, 2.1-2.4, 3.1, 3.5, 3.8	Participates in a variety of spoken exchanges with co-workers and stakeholders when developing options and implementing the continuous improvement plan
Numeracy	1.1-1.5, 2.5, 3.3	- Selects and interprets mathematical information to analyse performance - Performs calculations required to establish timeframes, cost-benefits and measures for continuous improvement and innovation processes
Navigate the world of work	2.6	Adheres to organisational policies and procedures and considers own role in terms of its contribution to broader goals of the work environment
Interact with others	1.6, 2.1-2.4, 3.1, 3.5, 3.8	- Recognises the importance of taking audience, purpose and contextual factors into account when making decisions about what to communicate, with whom, why and how - Recognises the importance of building rapport to establish positive and effective working relationships - Collaborates with others to achieve joint outcomes, playing an active role in encouraging innovation and facilitating effective group interaction
Get the work done	1.1, 1.2, 1.3, 1.5, 1.6, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.7	- Plans, organises, implements or reviews organisational strategies, systems and processes - Applies problem-solving processes to identify risks, evaluate options and determine solutions - Uses lateral and analytical thinking to evaluate options against needs, resources and constraints before making decisions - Facilitates a climate in which creativity and innovation

		are accepted as an integral part of achieving outcomes • Recognises that the current way is only one way of doing something and explores possibilities that challenge current approaches • Actively identifies systems, devices and applications with potential to meet current and or future needs, with the help of specialists

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMGT608 Manage innovation and continuous improvement	BSBMGT608C Manage innovation and continuous improvement	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMGT608 Manage innovation and continuous improvement

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- analyse and evaluate systems and performance in key areas of the organisation and identify opportunities for improvement, seeking advice from experts as appropriate
- promote the value of creativity, innovation and sustainability and recognise successes
- support the testing and trialling of new ideas and undertake risk management and cost-benefit analysis for options
- plan for and implement improvements using organisation's processes for approvals, project management and change management
- facilitate effective contributions to and communications about continuous improvement and innovation
- capture insights, experiences and ideas for improvements and incorporate them into the organisation's knowledge management systems and future planning.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline cost-benefit analysis methods
- describe creativity and innovation theories and concepts
- list organisational learning principles
- identify quality management and continuous improvement theories
- describe relevant risk management concepts
- outline relevant sustainability practices.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership field of work and include access to:

- relevant workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMKG401 Profile the market

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to profile a target market or market segments in accordance with a marketing plan and to develop market positioning strategies.

It applies to individuals working in a variety of marketing communications occupational roles who have responsibility for a range of tasks involving analysis and planning.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Business Development – Marketing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Segment market	1.1 Identify criteria for use in segmenting market in accordance with marketing plan 1.2 Identify and access sources of information for segmenting and profiling markets in accordance with marketing plan 1.3 Segment market in accordance with identified criteria 1.4 Review market segments for their usefulness in terms of factors such as their size, potential, distinctive needs, easy identification of members or distinctive media use patterns

ELEMENT	PERFORMANCE CRITERIA
	1.5 Select market segments to meet marketing objectives, and choose and apply new segmentation criteria if required
2. Identify target market	2.1 Evaluate approaches to determining and describing total market for a product or service 2.2 Define target market in terms of consumers to be included as prospective users of a product or service, and selected market segments 2.3 Use segment descriptors to describe target market 2.4 Identify available strategic marketing options and select targeting strategies that best meet requirements of the marketing plan
3. Profile target audience	3.1 Describe total market and selected market segments using a consumer profile 3.2 Identify consumer characteristics in standard statistical terms and/or descriptive terms used in media selection in consumer profile 3.3 Use demographic and/or psychographic descriptions in consumer profile in accordance with requirements of the marketing plan 3.4 Describe consumer attitudes to products or services being offered 3.5 Ensure profile meets organisational requirements of language, format, content and level of detail
4. Develop positioning strategy	4.1 Identify available positioning strategies and choose a strategy to meet marketing requirements and consumer profile 4.2 Write a positioning implementation plan containing several options, in accordance with organisational requirements 4.3 Submit plan to supervisor within specified timelines and make appropriate adjustments based on feedback

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description

Reading	1.1-1.4, 2.1, 2.2, 2.4, 3.2, 3.3, 4.1	Gathers, interprets and analyses a variety of textual information from a range of sources to identify relevant and key information
Writing	1.3, 2.2, 2.3, 3.1-3.5, 4.2, 4.3	Prepares strategic business documentation incorporating appropriate vocabulary, grammatical structure and conventions appropriate to text and audience
Numeracy	1.1-1.5, 2.1, 2.2, 2.4, 3.2, 3.3	Uses mathematical skills to interpret and process data and statistical information
Navigate the world of work	1.1, 1.2, 1.5, 2.4, 3.3, 3.5, 4.1, 4.2	Adheres to implicit and explicit organisational goals, policies and procedures
Interact with others	4.3	Selects appropriate form, channel and mode of communication for a specific purpose relevant to own role
Get the work done	1.2-1.5, 2.1, 2.4, 4.1-4.3	- Develops and implements plans to manage relatively complex, non-routine tasks with an awareness of how they contribute to organisational goals - Makes decisions by systematically analysing information, identifying and evaluating options against set criteria, and choosing most appropriate option

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMKG401 Profile the market	BSBMKG401B Profile the market	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMKG401 Profile the market

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop a market positioning strategy that documents market segmentation, consumer profiling, targeting and strategies relevant to a product or service being offered to the marketplace.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify relevant information relating to the Australian Marketing Institute Code of Professional Conduct
- outline requirements of legislation affecting marketing roles
- explain data collection and analysis techniques
- outline relevant industry knowledge including:
 - components of marketing mix
 - elements of marketing planning
- explain marketing communications concepts and processes
- identify organisational structures, roles, responsibilities, business and marketing plans
- demonstrate knowledge of relevant product and service standards and best practice models
- outline relevant statistical terms used by the Australian Bureau of Statistics.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the business development – marketing field of work and include access to:

- relevant legislation, regulations, standards and codes

- relevant workplace documentation and resources
- case studies and, where possible, real situations.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMKG412 Conduct e-marketing communications

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to prepare electronic advertisements for use in internet, email or facsimile marketing communications, and to evaluate their effectiveness in achieving marketing objectives.

It applies to individuals working in promotional roles who are required to use electronic communications and existing business websites to effectively convey marketing communications and achieve marketing objectives in accordance with marketing or e-marketing plans.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Business Development – Marketing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare electronic advertisements	1.1 Choose media for electronic advertisements in accordance with the organisation's marketing (or e-marketing) strategy 1.2 Select multiple marketing channels to optimise marketing effort 1.3 Ensure copy and design elements communicate desired image, features and benefits of products or services, and suit

ELEMENT	PERFORMANCE CRITERIA
	characteristics of chosen media 1.4 Position and size each element of advertisement to achieve balance and focus 1.5 Ensure typeface selections suit product, chosen media and central message of advertisement, and that layout achieves balance in its elements including white space and margins 1.6 Ensure any added sound, animation or graphics enhance content of advertisements and do not distract from message 1.7 Ensure advertisements meet requirements of marketing strategy as well as legal and ethical requirements
2. Use business website as e-marketing tool	2.1 Identify website marketing objectives in organisation's marketing (or e-marketing) strategy and plan 2.2 Ensure website design meets objectives and conveys required image of the business and features and benefits of its products or services 2.3 Ensure website content, site map, navigation buttons, frames and multiple pages are in accordance with marketing strategy and plan 2.4 Ensure website incorporates data recording, contacts and feedback mechanisms to allow evaluation of website as a marketing tool
3. Use e-marketing	3.1 Identify required media vehicles and website hotlinks for electronic advertisements, and negotiate contracts for website development where necessary to meet requirements of the marketing strategy, budget and legal and ethical requirements 3.2 Promote marketing channels to identified target market segments 3.3 Place or disseminate electronic advertisements in accordance with marketing strategy, media contracts, and legal and ethical requirements
4. Monitor and evaluate results of e-marketing	4.1 Monitor transmission of electronic advertisements or other e-marketing products and rectify any errors or omissions 4.2 Develop measures of effectiveness for e-marketing advertisements and monitor effectiveness 4.3 Evaluate effectiveness of e-marketing advertisements against measures of effectiveness and record outcomes in accordance with organisational requirements 4.4 Use outcomes of evaluation activities and other feedback from

ELEMENT	PERFORMANCE CRITERIA
	marketing channels to plan for improvements to e-marketing strategies and products

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.7, 2.1-2.4, 3.1-3.3, 4.1-4.4	Interprets textual information obtained from a range of sources and determines how content may be applied to individuals and to organisational requirements
Writing	1.3, 2.2-2.4, 3.2, 3.3, 4.1-4.4	Integrates information from a number of sources to develop material that supports the purposes and format of the documentation using suitable grammatical structure and clear, logical language
Oral Communication	3.1, 3.2	- Articulates ideas and requirements clearly and creatively based on techniques appropriate to audience and environment - Elicits the view and opinions of others by listening and questioning
Numeracy	1.4, 1.5, 3.1, 4.2-4.4	- Uses basic mathematical skills to ensure advertisement layout designs are correct - Interprets and analyses statistical information to help design and determine measures of effectiveness
Navigate the world of work	1.1, 1.7, 3.1, 3.3, 4.3	- Appreciates the implications of ethical, legal and regulatory responsibilities related to own work - Adheres to organisational policies and procedures and considers own role in terms of its contribution to broader goals of the work environment
Interact with others	3.2, 3.3	Selects the appropriate form, channel and mode of communication for a specific purpose relevant to own role
Get the work done	1.1-1.7, 2.1-2.4, 3.1, 4.2	- Develops plans to manage tasks with an awareness of how they may contribute to longer term operational and strategic goals - Takes responsibility for the outcomes of routine decisions related directly to own role - Understands the purposes, specific functions and key

		features of common digital systems and tools and operates them effectively to complete routine tasks • Understands and explicitly applies some basic principles of analytical and lateral thinking • Recognises and takes responsibility for addressing predictable and some less predictable problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMKG412 Conduct e-marketing communications	BSBMKG412A Conduct e-marketing communications	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMKG412 Conduct e-marketing communications

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop electronic advertisement for a product or service using electronic media to convey marketing communications consistent with an organisational marketing strategy and objectives
- monitor and evaluate results of electronic advertisements and marketing.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify key provisions of relevant legislation, codes of practice and national standards that affect marketing operations
- describe industry products and services knowledge
- explain intellectual property requirements
- identify organisational structure, roles and responsibilities
- outline principles of marketing and advertising
- describe software applications used in conducting electronic advertising and marketing.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the business development – marketing field of work and include access to:

- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies and, where possible, real situations.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMKG413 Promote products and services

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to coordinate and review the promotion of an organisation's products and services.

It applies to individuals with a broad knowledge of the promotion of products and services specific to an organisation. They may have responsibility to provide guidance or to delegate aspects of these tasks to others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Business Development – Marketing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan promotional activities	1.1 Identify and assess promotional activities to ensure compatibility with organisational requirements 1.2 Plan and schedule promotional activities according to the marketing needs of the organisation 1.3 Determine overall promotional objectives in consultation with designated individuals and groups 1.4 Ensure that timelines and costs for promotion of activities are

ELEMENT	PERFORMANCE CRITERIA
	realistic and consistent with budget resources 1.5 Develop action plans to provide details of products and services being promoted
2. Coordinate promotional activities	2.1 Ensure personnel and resources to support promotional activities are identified and prepared to facilitate the achievement of promotional goals 2.2 Identify and agree roles and responsibilities for delivery of promotional services and allocate to relevant personnel 2.3 Establish and conduct relationships with targeted groups in a manner which enhances the positive image of the organisation 2.4 Use networks to assist in the implementation of promotional activities
3. Review and report on promotional activities	3.1 Analyse audience feedback and data to determine the impact of the promotional activity on the delivery of products and services 3.2 Assess effectiveness of planning processes to identify possible improvements in future activities 3.3 Collect feedback and provide to personnel and agencies involved in promotional activity 3.4 Analyse costs and time lines to evaluate the benefits accruing from the promotional activities 3.5 Prepare conclusions and recommendations from verifiable evidence and provide constructive advice on future directions of promotional activities

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1	Interprets, analyses and collates textual information relevant to promotional activities from a range of sources
Writing	1.2, 1.5, 2.3, 3.1, 3.3, 3.5	Uses clear and specific language to develop formal and informal documents for different audiences in accordance with organisational requirements

Oral Communication	1.3, 2.3, 3.3, 3.5	- Actively participates in verbal exchanges of ideas and elicits the views and opinions of others by listening and questioning - Uses clear and specific language to clarify, explain and present information relating to the promotional activity
Numeracy	1.4, 1.5, 3.1, 3.3, 3.4, 3.5	Classifies, analyses and compares numeric information, including costs and timelines, relevant to the promotional activity
Navigate the world of work	1.1	Adheres to legislative requirements and organisational policies and procedures
Interact with others	1.3, 2.3, 2.4, 3.3, 3.5	- Selects and uses appropriate conventions and protocols with a range of stakeholders to project a professional image while seeking or sharing information - Recognises the importance of building rapport to establish and maintain positive working relationships
Get the work done	1.2, 1.2, 1.4, 1.5, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 3.5	- Sequences and schedules complex activities, monitors implementation and manages relevant communication - Uses systematic, analytical processes in complex, non-routine situations, gathering relevant information and identifying and evaluating options against agreed requirements - Evaluates effectiveness of decisions in terms of how well they meet stated goals - Uses a range of digital tools to access data, and to extract, organise, integrate and share relevant information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMKG413 Promote products and services	BSBMKG413A Promote products and services	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMKG413 Promote products and services

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify the context for the promotional activities including:
 - relevant legislation/regulations
 - organisation's goals, objectives, systems, policies and procedures
 - budget and timelines
 - marketing needs and, if defined, marketing plans
 - objectives of the promotional activities
- consult with relevant stakeholders to plan promotional activities to meet objectives, budget and timelines
- coordinate promotional activities including:
 - allocation of personnel, roles and responsibilities
 - sourcing other resources and promotional products as appropriate
 - use of networks and relationships
- analyse feedback and data to evaluate the effectiveness of planning processes and promotional activities and make recommendations on future directions of promotional activities.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the legislative and regulatory context of the organisation as relevant to the marketing plan
- outline the planning processes for organising promotional activities

- explain the organisation's marketing objectives and how they support the overall business objectives
- explain how common promotional activities could be used to support the marketing objectives with reference to
 - advertising
 - client functions
 - employee functions
 - media announcements
 - product launches
 - web pages.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the business development – marketing field of work and include access to:

- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMKG501 Identify and evaluate marketing opportunities

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to identify, evaluate and take advantage of marketing opportunities by analysing market data, distinguishing characteristics of possible markets and assessing viability of changes to operations.

It applies to individuals working in a supervisory or management marketing or advertising role within a marketing or advertising team or media organisation.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Business Development – Marketing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify marketing opportunities	1.1 Analyse information on market and business needs to identify marketing opportunities 1.2 Research potential new markets and assess opportunities to enter, shape or influence each market, and the likely contribution to the business 1.3 Explore entrepreneurial, innovative approaches and creative ideas for their potential business application, and develop into potential marketing opportunities

ELEMENT	PERFORMANCE CRITERIA
2. Investigate marketing opportunities	2.1 Identify and analyse opportunities in terms of their likely fit with organisational goals and capabilities 2.2 Evaluate each opportunity to determine its impact on current business and customer base 2.3 Use an assessment of external factors, costs, benefits, risks and opportunities to determine the financial viability of each marketing opportunity 2.4 Determine probable return on investment and potential competitors 2.5 Describe and rank marketing opportunities on their viability, and likely contribution to the business
3. Evaluate required changes to current operations	3.1 Identify and document changes needed to current operations to take advantage of viable marketing opportunities 3.2 Ensure organisational changes to service an increased or different customer base including provision for continued quality of service to existing customers 3.3 Estimate resource requirements for changed operations 3.4 Determine and communicate viability of making changes to current operations to key stakeholders 3.5 Document newly identified marketing opportunities and required changes

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1-2.4, 3.1	Evaluates and comprehends textual information from a range of sources and draws own conclusions
Writing	1.1-1.3, 2.5, 3.1, 3.4, 3.5	Integrates information from a number of sources to develop material that supports purposes of documentation using suitable grammatical structure and clear, logical language
Oral Communication	2.5, 3.4	Presents opinions, ideas and organisational requirements clearly and creatively using language and presentation techniques appropriate to audience and

		environment Elicits views and opinions of others by listening and questioning
Numeracy	2.3, 2.4, 3.3	Evaluates financial and marketing data using whole numbers, decimals and percentages to make accurate calculations
Navigate the world of work	2.1	Recognises and follows explicit and implicit organisational protocols and meets expectations associated with own role
Interact with others	2.5, 3.4	Selects appropriate form, channel and mode of communication for a specific purpose relevant to own role
Get the work done	1.1-1.3, 2.1-2.4, 3.1, 3.2, 3.3, 3.4	- Develops plans to manage relatively complex tasks with an awareness of how they may contribute to longer-term operational and strategic goals - Makes decisions by systematically analysing information, identifying and evaluating options against set criteria, and choosing most appropriate option - Evaluates outcomes of decisions to identify opportunities for improvement - Develops new and innovative ideas through exploration, analysis and critical thinking

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMKG501 Identify and evaluate marketing opportunities	BSBMKG501B Identify and evaluate marketing opportunities	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMKG501 Identify and evaluate marketing opportunities

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify and evaluate marketing opportunities to determine whether they can meet organisational objectives
- document how current business operations need to be modified, and list resources required, to take advantage of newly identified and evaluated opportunities.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline key provisions of relevant legislation, codes of practice and national standards affecting marketing operations
- describe organisational marketing plan, structure, products and services
- explain principles of marketing and marketing mix
- describe statistical methods and techniques to evaluate marketing opportunities, including forecasting techniques.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the business development – marketing field of work and include access to:

- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- organisational strategic and marketing plans
- case studies and, where possible, real situations.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBPMG409 Apply project scope management techniques

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to contribute to the control of a project's scope by assisting with identifying its objectives, deliverables, constraints, assumptions and outcomes; and by applying controls once the project has commenced.

It applies to individuals who are project practitioners working in a project support role.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Project Management

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Contribute to defining project scope	1.1 Review project initiation documentation and assist in identifying project objectives and requirements 1.2 Contribute to identifying project deliverables 1.3 Contribute to identifying measurable outcomes to enable evaluation of project performance 1.4 Contribute to developing and documenting the scope management plan 1.5 Assist in obtaining agreement to scope from relevant project

ELEMENT	PERFORMANCE CRITERIA
	authority
2. Apply project scope controls	2.1 Undertake work according to agreed project scope management plan and by using established change control procedures and performance measurement procedures 2.2 Communicate instances of non-compliance with overall scope to the project manager and other team members
3. Contribute to review of scope controls	3.1 Measure progress to determine potential, perceived and actual scope changes 3.2 Appropriately report scope changes 3.3 Assist in review of project outcomes to determine effectiveness of initial and subsequent scope management approaches

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1	Interprets and analyses complex texts
Writing	1.4, 1.5, 3.2	Develops and amends plans and associated documentation using appropriate organisational formats and vocabulary
Oral Communication	1.2-1.5, 2.2	Interacts effectively in verbal exchanges, using clear language to convey information, and active listening and questioning to clarify understanding
Numeracy	1.3, 3.1	Selects and applies a range of mathematical and problem-solving strategies to develop timelines and monitor progress
Interact with others	1.2-1.5, 2.2	- Uses appropriate communication practices in a range of work contexts - Collaborates and cooperates with others to achieve shared goals
Get the work done	2.1, 3.1, 3.2, 3.3	- Plans and organises tasks required to monitor and report on project implementation - Analyses outcomes to identify future

		improvements

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBPMG409 Apply project scope management techniques	BSBPMG409A Apply project scope-management	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBPMG409 Apply project scope management techniques

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- contribute to delineating and controlling project scope
- record project scope management plan
- interpret and follow project initiation documentation for purposes of documenting project scope.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list components of a project scope management plan
- identify and describe factors likely to impact project scope
- outline formal change-control processes
- identify and discuss methods for measuring work outcomes and progress against plans
- identify and discuss methods for segmenting and documenting a work breakdown structure
- explain procedures for reporting a change in scope
- describe types of project initiation documentation.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership – project management field of work and include access to:

- project documentation which includes information about project scope
- case studies and, where possible, real situations.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBPRO401 Develop product knowledge

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to develop product knowledge in preparation for the sales process.

It applies to individuals who need to solve a defined range of unpredictable problems, analyse and evaluate information from a variety of sources and who may provide leadership and guidance to others with some limited responsibility for the output of others.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Industry Capability – Product Skills and Advice

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Acquire knowledge of products in a specified area	1.1 Identify information sources about products in a specified area and evaluate them for reliability and validity 1.2 Identify product purpose/s and use/s 1.3 Identify key features of the product/s 1.4 Identify product strengths and weaknesses 1.5 Articulate guarantees and warranties and identify service support details

ELEMENT	PERFORMANCE CRITERIA
2. Convert product knowledge into benefits	2.1 Identify features of the product which have potential buyer appeal 2.2 Present features of the product which have buyer appeal as benefits to the buyer 2.3 Present product benefits within the context of organisational requirements and legislation
3. Evaluate competitors' products	3.1 Use a range of information sources to identify competitors' products 3.2 Compare features, benefits, strengths and weaknesses of competitors' products with own products 3.3 Establish relative standing of the organisation's product with the competitors' product/s and communicate differences to the buyer

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.3, 1.4, 2.1, 3.1, 3.2, 3.3	Identifies, interprets, understands and compares information to monitor and evaluate quality of product and services and check against client requirements
Writing	1.1, 1.5, 2.2, 2.3, 3.2	- Records results of product evaluations to show clear comparisons of features, benefits and weaknesses - Uses clear and specific language to develop documents for different audiences in accordance with organisational requirements
Oral Communication	2.2, 2.3, 1.5, 3.3	Provides recommendations using language appropriate to the purpose and audience
Numeracy	1.3, 1.4, 3.2, 3.3	Analyses numerical information to measure, compare and evaluate features
Navigate the world of work	2.3	Understands and follows organisational policies and procedures and legislative requirement relevant to own role
Get the work	1.1, 3.1, 3.3	Plans and implements tasks required to achieve required outcomes

done		Analyses information to decide on appropriate recommendations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBPRO401 Develop product knowledge	BSBPRO401A Develop product knowledge	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBPRO401 Develop product knowledge

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use valid and reliable sources to gather information about the organisation's products and competitors' products
- determine buyer needs and present key features and benefits of product to match needs, in accordance with organisational and legislative obligations
- compare competitors' products with own organisation's products and communicate differences to buyer.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list sources of information for own organisation's products and competitors' products
- explain why it is important to discuss features, benefits, strengths and weaknesses when describing products
- summarise industry competitors, including products offered and potential buyer markets
- outline organisational policies and procedures, relevant to the sales process
- outline the key provisions of relevant legislation, regulations, standards and codes of practice that are relevant to the sales process.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the industry capability – product skills and advice field of work and include access to:

- information sources regarding an organisation's and competitors' products, service or ideas
- office equipment and resources
- relevant organisational policies and procedures
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBREL401 Establish networks

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to develop and maintain effective work relationships and networks through relationship building and negotiation skills required by workers within an organisation as well as freelance or contract workers.

It applies to individuals with a broad knowledge of networking and negotiation who contribute well developed skills in creating solutions to unpredictable problems through analysis and evaluation of information from a variety of sources. They may have responsibility to provide guidance or to delegate aspects of tasks to others.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Stakeholder Relations – Relationship Management

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Develop and maintain business networks	1.1 Use appropriate network strategies to establish and maintain relationships that promote the development of business opportunities 1.2 Identify and pursue network opportunities to maximise a range of contacts 1.3 Communicate information regarding new networks to inform

ELEMENT	PERFORMANCE CRITERIA
	individuals, colleagues and clients of potential benefits 1.4 Participate in professional networks and associations to obtain and maintain personal knowledge and skills
2. Establish and maintain business relationships	2.1 Develop and maintain relationships to promote benefits consistent with organisational/client requirements 2.2 Gain and maintain trust and confidence of contacts through demonstration of high standards of business practices 2.3 Use a high level of negotiation skills to encourage positive outcomes 2.4 Identify difficult situations and negotiate solutions using collaborative problem-solving techniques 2.5 Seek specialist advice in the development of contacts where appropriate
3. Promote the relationship	3.1 Develop strategies to represent and promote the interests and requirements of the relationship 3.2 Use appropriate presentation skills to communicate the goals and objectives of the relationship 3.3 Effectively communicate issues, policies and practices of the relationship to a range of audiences, in writing and verbally 3.4 Obtain feedback to identify and develop ways to improve promotional activities within available opportunities

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	1.4, 3.4	Seeks opportunities to develop and extend expertise and identify areas for professional improvement
Reading	2.1	Sources and analyses information to establish networks that consistently promote business opportunities
Writing	1.1-1.3, 2.1, 2.2, 2.5 3.1-3.4	Uses appropriate vocabulary, layout and grammatical structure to convey ideas and information

Oral Communication	1.1-1.4, 2.1-2.5, 3.2, 3.3, 3.4	- Utilises persuasive language and appropriate non-verbal features to achieve mutually acceptable outcomes - Uses active listening and questioning techniques to confirm understanding
Navigate the world of work	2.1	Understands and adheres to organisational policies and procedures
Interact with others	1.1-1.4, 2.1-2.5, 3.1, 3.2	- Actively identifies the requirements of important communication exchanges, selecting appropriate channels, format, tone and content to suit purpose and audience - Looks for ways of establishing connections and building genuine understanding with a diverse range of people - Begins to cultivate relationships with people with the knowledge, skills and influence to get things done or provide support
Get the work done	1.1, 1.2, 2.1, 2.4	- Takes responsibility for planning, sequencing and implementing tasks required to build and maintain networks - Uses analytical processes to identify problems, gather relevant information, evaluate options and determine solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBREL401 Establish networks	BSBREL401A Establish networks	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBREL401 Establish networks

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify and use networking opportunities
- maintain records of relevant contacts
- use written and verbal communication skills to establish, cultivate and promote professional business relationships
- use feedback to improve promotional activities.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- list and describe strategies for establishing and maintaining business relationships
- identify relevant networks, organisations, agencies, associations or individuals
- describe the principles and techniques needed to negotiate positive outcomes
- explain client or organisational policies, plans and procedures relevant to business relationships
- outline methods for obtaining feedback on promotional activities.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the stakeholder relations – relationship management field of work and include access to:

- relevant workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBREL402 Build client relationships and business networks

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to establish, maintain and improve client relationships and to actively participate in networks to support attainment of key business outcomes.

It applies to individuals such as marketing and sales professionals who depend on excellent interpersonal relationships and communication skills to achieve outcomes but may also apply to other individuals working in any industry.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Stakeholder Relations – Relationship Management

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Initiate interpersonal communication with clients	1.1 Identify and use preferred client communication styles and methods 1.2 Establish rapport with clients using verbal and non-verbal communication processes 1.3 Investigate and act upon opportunities to offer positive feedback to clients

ELEMENT	PERFORMANCE CRITERIA
	1.4 Use open questions to promote two-way communication 1.5 Identify and act upon potential barriers to effective communication with clients 1.6 Initiate communication processes which relate to client needs, preferences and expectations
2. Establish client relationship management strategies	2.1 Develop client loyalty objectives focusing on the development of long term business partnerships 2.2 Assess client profile information to determine approach 2.3 Develop client loyalty strategies to attract and retain clients in accordance with the business strategy 2.4 Identify and apply client care and client service standards
3. Maintain and improve ongoing relationships with clients	3.1 Develop strategies to obtain ongoing feedback from clients to monitor satisfaction levels 3.2 Develop strategies to elicit feedback which provide information in a form that can be used to improve relationships with clients 3.3 Obtain feedback to develop and implement strategies which maintain and improve relationships with clients
4. Build and maintain networks	4.1 Allocate time to establish and maintain business contacts 4.2 Participate in business associations and/or professional development activities to establish and maintain a network of support for the business and to enhance personal knowledge of the market 4.3 Establish communication channels to exchange information and ideas 4.4 Provide, seek and verify information to the network

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.5, 2.2, 2.3, 2.4, 3.1, 4.2- 4.4	Interprets information from a range of sources to determine and adhere to communication and networking requirements

Writing	1.1,1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 4.2, 4.3	- Records notes from research and discussions for future reference - Develops materials for a specific audience according to organisational standards
Oral Communication	1.1-1.6, 2.3, 2.4, 3.3, 4.2-4.4	- Participates in spoken exchanges with a range of audiences using structure and language to suit the audience - Involves others in discussions using active listening and questioning techniques appropriately
Numeracy	2.4, 4.1	Performs calculations to determine timeframes and measure actual performance against required standards
Navigate the world of work	2.3, 2.4	Considers wider organisational goals when developing customer relationship strategies
Interact with others	1.1, 1.2, 1.5, 1.6, 3.3, 4.2-4.4	- Selects and uses appropriate conventions and protocols when communicating with clients or business contacts to build rapport, seek or present information - Recognises the need to alter personal communication style in response to the needs, values, beliefs and cultural expectations of others - Adapts personal communication style to build positive working relationships and show respect for the opinions, values and particular needs of others
Get the work done	1.1, 2.1-2.4, 3.1-3.3, 4.1-4.4	- Takes responsibility for planning, sequencing and implementing tasks and own workload to achieve business outcomes - Uses analytical processes to gather relevant information, identify and evaluate options and decide on appropriate systems and strategies - Actively monitors and evaluates effectiveness of decisions to identify and implement improvements

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBREL402 Build client relationships and business networks	BSBREL402A Build client relationships and business networks	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBREL402 Build client relationships and business networks

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify clients' preferred communication styles and methods and potential barriers to communications and use appropriate communication styles and strategies
- apply communication techniques to establish rapport and promote two-way communication
- develop and implement client loyalty strategies and service standards based on business objectives and client information
- develop and implement strategies to elicit feedback from clients and use it to improve relationships and customer satisfaction
- maintain contacts and participate in formal and informal networks that support the business and enhance personal knowledge of the market.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- give examples of strategies that can build client loyalty including those that focus on:
 - financial incentives and special offers
 - premium services and private/dedicated facilities
 - loyalty programs, rewards and recognition
- outline issues that are commonly addressed in client care/service standards in the industry
- outline typical barriers to communicating with clients and possible strategies to address them
- give examples of strategies for feedback
- describe the principles and techniques for effective communication and networking
- outline networking opportunities relevant to the business with reference to:

- government, industry and professional associations
- trade shows, conferences, briefings and other professional development activities
- existing groups or networks
- businesses and individuals
- outline aspects of organisational policies, procedures and processes that are relevant to communicating with clients and participating in networks.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the stakeholder relations - relationship management field of work and include access to:

- relevant workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSLS407 Identify and plan sales prospects

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to identify potential sales prospects by applying prospecting methods, and manage own sales performance by establishing a sales plan, while managing stress, time and sales-related paperwork.

It applies to individuals working in a sales-related position in a small, medium or large enterprise in a wide variety of industries, who identify, collate and follow up sales prospect information to generate leads. Individuals undertaking this unit may be at entry level, or have experience in sales sufficient to provide advice and support about aspects of sales solutions as part of a sales team.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Business Development – Sales

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Employ prospecting methods and qualify prospects	1.1 Identify, consider and evaluate strengths and limitations of range of primary and secondary prospecting methods 1.2 Select prospecting methods to match market to which the product or service is targeted 1.3 Target present, previous and new clients through chosen

ELEMENT	PERFORMANCE CRITERIA
	prospecting methods 1.4 Research and establish criteria for qualifying leads according to buyer accessibility, buyer motives, product affordability, purchase authority, legal compliance and return for seller 1.5 Ensure established criteria represent a standard against which buying potential of individuals and groups is gauged
2. Manage prospect information	2.1 Develop and implement system for recording prospect information 2.2 Monitor and evaluate effectiveness of system for recording prospect information 2.3 Refine system for recording prospect information based on evaluation
3. Establish individualised sales plan	3.1 Establish individual sales goals and quotas to focus work activities, based on organisational sales and marketing objectives 3.2 Establish consultation and communication structures with clients and supervisors 3.3 Plan and document individualised sales plan to achieve sales goals and quotas within a work system constructed against clear timeframes 3.4 Monitor and adjust sales plan to established goals and quotas 3.5 Evaluate sales plan and adjust where necessary
4. Complete sales paperwork and reports	4.1 Establish system to collect, record and organise data associated with sales process 4.2 Complete routine reports at regular intervals according to organisational requirements 4.3 Use available technology to facilitate record-keeping and production of sales reports
5. Organise workload effectively	5.1 Establish routines to provide structure for work and to manage workload 5.2 Allocate time for specific work tasks and unanticipated events and activities 5.3 Conduct analysis of time spent on work-related activities and adjust time spent on tasks, if required 5.4 Apply time-management strategies to minimise non-productive sales activities 5.5 Delegate tasks to individuals or sales team members to share

ELEMENT	PERFORMANCE CRITERIA
	workload as appropriate 5.6 Identify and monitor symptoms of stress and seek expert assistance

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.5, 2.1-2.3, 3.1-3.5, 4.1-4.3, 5.1-5.4	Analyses and evaluates textual information to develop research strategies, integrate facts and ideas and meet organisational requirements
Writing	1.1-1.5, 2.1-2.3, 3.1-3.5, 4.1-4.3, 5.1-5.4	Creates documents using specific and detailed language to convey explicit information, requirements and recommendations
Oral Communication	1.3, 5.2, 5.5	- Presents information using clear language suited to the audience - Uses listening and questioning skills to check and confirm understanding
Numeracy	1.4-1.5, 3.1, 3.3-3.5, 5.2-5.4	Applies ratios and percentages and relevant formulae to data to calculate and interpret time durations and establish financial goals
Navigate the world of work	1.4, 3.1, 3.4, 4.2	Follows explicit and implicit organisational objectives, protocols and legal requirements
Interact with others	1.3, 3.2, 5.5, 5.6	- Tailors communication to achieve purpose, demonstrating a sophisticated understanding of audience needs - Collaborates with others to achieve organisational objectives
Get the work done	1.1, 1.3, 1.4, 2.1, 2.2, 3.3-3.5, 4.1-4.3, 5.1, 5.3-5.6	- Sequences and schedules complex activities of self and others and monitors implementation - Uses systematic, analytical processes in complex, non-routine situations, setting goals, gathering relevant information and evaluating options against agreed criteria - Monitor implementation of solutions and reflects on outcomes to identify appropriate action

		• Develops new and innovative ideas through exploration, analysis and critical thinking • Uses main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSLS407 Identify and plan sales prospects	BSBSLS407A Identify and plan sales prospects	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSLS407 Identify and plan sales prospects

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- evaluate and select the use and management of different sales prospecting methods
- develop, monitor and refine a system for recording prospecting methods
- plan, document and monitor individualised sales plan
- establish data collection system
- use appropriate technology
- organise, analyse and delegate workloads to maximise productivity
- identify and monitor symptoms of stress.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe information management strategies used to manage prospect and sales data
- identify key principles associated with self-management
- outline key provisions of relevant legislation, codes of practice and national standards related to the sales environment
- describe prospecting methods used in sales process
- identify principles of buyer motives
- describe strategies and techniques used to prevent and manage stress.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the business development – sales field of work and include access to:

- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSLS408 Present, secure and support sales solutions

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to present sales solutions that respond to specific buying needs of a client, and to use sales processes associated with securing prospect commitment to proceed with a sale.

It also includes attending to post-sales activities that build and strengthen the partnership between a salesperson and client, and enhance the likelihood of future sales.

It applies to individuals working in sales-related positions in a small, medium or large enterprise, in a wide variety of industries, who may provide sales solutions individually, or provide advice and support on aspects of sales solutions to support a sales team.

No licensing, legislative or certification requirements apply to this unit at the time of publication

Unit Sector

Business Development – Sales

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for sales presentation	1.1 Obtain and organise products, ideas and services for use within sales presentation 1.2 Review product information to ensure familiarity with products

ELEMENT	PERFORMANCE CRITERIA
	1.3 Identify sales tactics, and assess and choose options that meet needs and preferences of the prospect 1.4 Consider variety of sales solutions and prepare to meet buyer needs 1.5 Identify and select sales aids 1.6 Identify alternatives for prospects and assess in relation to anticipated buyer needs
2. Present sales solution	2.1 Use gestures, posture, body language, facial expressions and voice to create a supportive selling environment 2.2 Use listening skills and open-ended questions to identify buyer needs, preferences, motives and objections 2.3 Adjust presentation to match needs and preferences of buyer 2.4 Use persuasive communication techniques to secure buyer interest 2.5 Ensure presentation demonstrates and communicates key features of product and emphasises benefits in relation to identified buyer needs 2.6 Obtain and present proof of benefits through product purchase 2.7 Use sales aids to build buyer understanding of how product aligns with needs
3. Respond to buyer signals	3.1 Identify and assess verbal and non-verbal buying signals 3.2 Use probing to identify source of buyer resistance 3.3 Identify strengths and limitations of buyer resistance strategies 3.4 Select and implement strategy for managing buyer resistance 3.5 Use trial closes strategically during different stages of sales process
4. Negotiate and finalise sale	4.1 Initiate formal close to sales process following one or more trial closes 4.2 Select strategy to close sale, and use supportive and confirming language to support closure 4.3 Negotiate conditions of agreement, outline a summary of agreement to buyer, and confirm buyer's decision 4.4 Provide advice on financing arrangements, if required 4.5 Prepare and complete sales documents, and process and monitor client order

ELEMENT	PERFORMANCE CRITERIA
	4.6 Identify and present cross-selling opportunities to buyer
5. Support post-sale activities	5.1 Ensure contact is made with buyer post-sale to ensure agreed expectations have been met 5.2 Provide technical assistance or advice and assist clients to access appropriate after-sales support 5.3 Use feedback solicitation regarding sales process and product satisfaction 5.4 Address and resolve service problems and difficulties identified through feedback 5.5 Develop and implement client loyalty strategies to secure buyer loyalty and facilitate ongoing contact 5.6 Offer and implement additional sales solutions and benefits to clients when opportunities arise

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.6, 2.7, 4.3-4.6, 5.1-5.6	Analyses and evaluates textual information to develop research strategies, integrate facts and ideas, and meet organisational requirements
Writing	1.1, 4.5-4.6, 5.1-5.6	Creates documents using specific and detailed language to convey explicit information, requirements and recommendations
Oral Communication	1.1, 2.1-2.7, 3.1-3.5, 4.1-4.6, 5.1-5.6	- Obtains information by listening and questioning, and - Participates in discussions using detailed, clear and persuasive language to contribute details, express requirements and provide advice
Numeracy	2.6, 4.3-4.5, 5.5	Identifies, interprets and compares mathematical information in simple and familiar written texts
Interact with others	2.3, 2.4, 3.2-3.4, 4.2, 5.3-5.5	- Uses a range of interpersonal skills to build rapport and establish relationships with others - Tailors communication to achieve purpose, demonstrating a sophisticated understanding of audience needs

Get the work done	1.1-1.3, 2.1-2.7, 3.2, 3.4, 3.5, 4.1-4.6, 5.1-5.6	- Sequences and schedules complex activities to achieve outcomes in a timely fashion - Uses systematic, analytical processes in complex, non-routine situations, setting goals, designing strategies, gathering relevant information and evaluating options - Uses formal and informal processes to monitor implementation of solutions and reflect on outcomes - Uses main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSLS408 Present, secure and support sales solutions	BSBSLS408A Present, secure and support sales solutions	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSLS408 Present, secure and support sales solutions

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify principles of effective sales presentation
- identify buyer needs and present sales solution
- manage buyer resistance
- finalise a sale
- implement support for post-sale activities.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- demonstrate detailed product knowledge, including product:
 - advantages and disadvantages
 - features
 - service benefits
- identify materials and aids that support presentations
- identify principles for achieving an effective sales presentation mix
- describe statistical methods used to demonstrate sales performance
- describe strategies used to:
 - manage client accounts
 - build client goodwill
 - develop client loyalty.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the business development – sales field of work and include access to:

- office equipment and resources
- support materials for effective presentations
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSLS501 Develop a sales plan

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to develop a sales plan for a product or service for a team covering a specified sales territory based on strategic objectives and in accordance with established performance targets.

It applies to individuals working in a supervisory or managerial sales role who develop a sales plan for a product or service.

No licensing, legislative or certification requirements apply to this unit at the time of publication

Unit Sector

Business Development – Sales

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify organisational strategic direction	1.1 Obtain and analyse assessment of market needs and strategic planning documents 1.2 Review previous sales performance and successful approaches to identify factors affecting performance 1.3 Analyse information on market needs, new opportunities, customer profiles and requirements as a basis for decision making
2. Establish performance	2.1 Determine practical and achievable sales targets

ELEMENT	PERFORMANCE CRITERIA
targets	2.2 Establish realistic time lines for achieving targets 2.3 Determine measures to allow for monitoring of performance 2.4 Ensure objectives of the sales plan and style of the campaign are consistent with organisational strategic objectives and corporate image
3. Develop a sales plan for a product	3.1 Determine approaches to be used to meet sales objectives 3.2 Identify additional expertise requirements and allocate budgetary resources accordingly 3.3 Identify risks and develop risk controls 3.4 Develop advertising and promotional strategy for product 3.5 Identify appropriate distribution channels for product 3.6 Prepare a budget for the sales plan 3.7 Present documented sales plan to appropriate personnel for approval
4. Identify support requirements	4.1 Identify and acquire staff resources to implement sales plan 4.2 Develop an appropriate selling approach 4.3 Train staff in the selling approach selected 4.4 Develop and assess staff knowledge of product to be sold
5. Monitor and review sales plan	5.1 Monitor implementation of the sales plan 5.2 Record data measuring performance versus sales targets 5.3 Make adjustments to sales plan as required to ensure required results are obtained

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.4, 3.5, 4.1, 5.1-5.3	- Analyses and interprets workplace documentation - Recognises information in job specifications and work processes related to sales requirements

Writing	1.2, 2.1-2.3, 3.1-3.6, 4.2, 4.3, 5.1- 5.3	- Accurately records information according to organisational requirements - Composes and edits texts, selecting appropriate vocabulary and structure for audience and purpose
Oral Communication	3.7, 4.1, 4.3, 4.4	- Presents information to a range of audiences using appropriate structure and language - Uses questioning and active listening to request feedback or to clarify or confirm understanding
Numeracy	1.1-1.3, 2.1-2.3, 3.2, 3.6, 5.2-5.3	Uses a wide range of mathematical calculations to enter or analyse information related to sales plans, targets and performance
Navigate the world of work	1.1, 2.4	Considers organisational goals when determining and developing sales plans and strategies
Interact with others	3.7, 4.1, 4.3, 4.4	- Identifies and uses appropriate conventions and protocols when communicating with a range of personnel - Demonstrates sophisticated control over oral, visual and/or written formats, drawing on a range of communication practices to achieve training goals
Get the work done	1.1, 1.3, 2.1-2.3, 3.2-3.7, 4.1, 4.2, 4.4, 5.1, 5.3	- Sequences and schedules complex activities, monitors implementation and manages relevant communication - Uses systematic, analytical processes in complex, non-routine situations, setting goals, designing strategies, gathering relevant information and evaluating options - Uses formal and informal processes to monitor implementation of solutions and reflect on outcomes - Develops new and innovative ideas through exploration, analysis and critical thinking

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSLS501 Develop a sales plan	BSBSLS501A Develop a sales plan	Updated to meet Standards for Training Packages Minor edits to clarify the intent of	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
		Performance Criteria	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSLS501 Develop a sales plan

Modification History

Release	Comments
Version 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- analyse information from a range of sources to develop a sales plan for a product and sales territory that meets organisational strategic direction including:
 - resource requirements and budget
 - achievable sales targets
 - performance measures
 - approaches to be used to meet objectives
 - risk management
 - advertising and promotional strategy
 - product distribution channels
- acquire staff, develop selling approach and provide training support on product knowledge and sales approach
- monitor and evaluate performance and adjust the plan as appropriate.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline principles and techniques for selling
- outline methods for monitoring sales outcomes
- explain the statistical techniques for analysing sales and market trends
- outline internal and external sources of information that are relevant to identifying organisational strategic direction and developing a product sales plan.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the business development – sales field of work and include access to:

- relevant workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSMB301 Investigate micro business opportunities

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to consider the major elements of a business idea, undertake research to determine viability of the business opportunity and present the idea with reference to the legislative frameworks affecting the business.

It applies to individuals who are establishing or operating a micro business for self-employment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Small and Micro Business

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Describe business ideas	1.1 Gather information for business ideas from appropriate sources 1.2 List details of business ideas and opportunities 1.3 Research alternative business ideas in light of available

ELEMENT	PERFORMANCE CRITERIA
	resources 1.4 Specify and list products and services to match business ideas 1.5 Identify and research potential customer information for business ideas 1.6 Identify and take into account available financial, digital technology, business and technical skills when researching business opportunities
2. Identify market needs	2.1 Collect information regarding market size and potential from appropriate sources 2.2 Investigate market trends and developments to identify market needs relative to business ideas 2.3 Gather market information from primary and secondary sources to identify possible market needs in relation to business ideas 2.4 Identify ethical and cultural requirements of the market, and their relevance for business ideas 2.5 Identify new and emerging markets and document their features 2.6 Identify and organise information on expected market growth or decline and associated risk factors
3. Investigate factors affecting the market	3.1 Identify projected changes in population, economic activity and labour force that may impact business ideas 3.2 Identify movements in prices, and projected changes in availability of resources 3.3 Review trends and developments and identify their potential impact on business ideas

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.5, 2.1-2.6, 3.1-3.3	Analyses and evaluates textual information to develop research strategies, integrate facts and ideas and meet

		business requirements
Writing	1.1, 1.2, 1.4, 1.5, 2.3, 2.5	Uses factual information and industry related terminology to complete required documentation
Oral Communication	1.1, 1.5, 2.3, 2.5	Clearly articulates requests using specific and relevant language, and uses listening and questioning techniques to confirm understanding
Numeracy	2.1, 3.1, 3.2	Extracts, evaluates and compares numerical information to determine resources and identify trends
Get the work done	1.1, 1.5, 1.6, 2.1, 2.2, 2.5, 2.6, 3.1, 3.2	- Identifies changes to processes, products or services within scope of own business opportunities - May invest time in developing and shaping several options before making a final choice, using a combination of lateral and analytical thinking to tailor and strengthen an idea to suit needs, resources and constraints - Uses a range of digitally based technology and applications to access and filter data, and then extract, organise, integrate and share relevant information in increasingly effective ways.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSMB301 Investigate micro business opportunities Release 2	BSBSMB301 Investigate micro business opportunities Release 1	Minor edits to clarify intent of unit	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSMB301 Investigate micro business opportunities

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- research and analyse information from a range of sources to investigate a business opportunity, including:
 - financial considerations
 - digital technologies
 - market size, potential and trends
 - ethical and cultural requirements of the market
 - resource availability
- review data for potential impact on the market, products, services and customers
- match products and services to the business opportunity.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- locate and outline legislation and regulation relevant to specific micro business opportunities being investigated
- identify sources of specialist advice on trends in new and emerging markets and decline and risk factors

- summarise benefits and challenges of digital technologies relevant to micro business opportunities
- describe appropriate business research methods and data collection tools and software.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the Management and Leadership – Small and Micro Business field of work and include access to:

- internet access for research
- data collection tools and software
- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies, or where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSMB402 Plan small business finances

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to identify financial requirements of a business, including profit targets, cash flow projections and strategies to garner financial support.

It applies to individuals who operate a small business or work within an existing micro or small businesses and interpret financial data.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Small and Micro Business

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify costs, calculate prices and prepare profit statement	1.1 Identify and document costs associated with production and delivery of business products and services 1.2 Calculate prices based on costs and profit margin, as an hourly

ELEMENT	PERFORMANCE CRITERIA
	charge-out rate for labour or unit price for products 1.3 Calculate break-even sales point to establish business viability and profit margins 1.4 Identify appropriate pricing strategies in relation to market conditions to meet business profit targets 1.5 Prepare projected profit statement to supplement the business plan
2. Develop a financial plan	2.1 Set profit targets or goals to reflect owner's desired returns 2.2 Identify working capital requirements necessary to attain profit projections 2.3 Identify non-current asset requirements and consider alternative asset management strategies 2.4 Prepare cash flow projections to enable business operation in accordance with business plan and legal requirements 2.5 Identify capital investment requirements accurately for each operational period 2.6 Select budget targets to enable ongoing monitoring of financial performance
3. Acquire finance	3.1 Identify start-up and ongoing financial requirements according to financial plan/budget 3.2 Identify sources of finance, including potential financial backers, to provide required liquidity for the business to complement business goals and objectives 3.3 Investigate cost of securing finance on optimal terms 3.4 Identify strategies to obtain finance as required to ensure financial viability of the business

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.5, 2.1-2.5, 3.1,	Identifies, analyses and evaluates complex information from a range of sources

	3.2	
Writing	1.1, 1.5, 2.1, 2.4, 3.2	Prepares written reports and workplace documentation that communicate complex information clearly and effectively
Oral Communication	1.1, 3.2	- Uses specific and relevant language to secure finance and uses questioning and listening techniques to clarify outcomes - Participates in verbal negotiations using tone and language suitable to audience
Numeracy	1.1-1.5, 2.1, 2.2, 2.4-2.6, 3.1, 3.3, 3.4	Analyses numerical information to determine costs, prices, profit and losses, and other financial data
Navigate the world of work	2.4	Appreciates implications of legal and regulatory responsibilities related to own work
Get the work done	1.1, 1.4, 2.1-2.3, 2.5, 2.6, 3.1, 3.2, 3.4	- Sequences and schedules complex activities, including implementing and monitoring financial strategies - Makes a range of critical and non-critical decisions in relatively complex situations, taking a range of constraints into account, making adjustments as necessary - Regularly uses formal thinking techniques to generate new ideas

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSMB402 Plan small business finances Release 2	BSBSMB402 Plan small business finances Release 1	Updated to clarify intent	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSMB402 Plan small business finances

Modification History

Release	Comments
Release 2	This version first released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop a financial plan which identifies financial requirements of the business, including cash flow projections and a projected profit statement
- follow the financial plan, including:
 - demonstrating an awareness of appropriate legal requirements
 - implementing strategies to monitor financial performance
- identify sources and investigate costs of securing appropriate financial assistance.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain break-even analysis
- clarify costing for the business, including margin or mark-up, hourly charge-out rates and unit costs
- summarise financial decision-making relevant to the business
- outline methods and relative costs of obtaining finance
- summarise principles for preparing balance sheets
- provide a detailed explanation of:
 - principles for preparation of cash flow forecasts
 - principles for preparation of profit and loss statements

- purpose of financial reports
- explain relevant accounting terminology
- describe working capital cycles.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the Management and Leadership – Small and Micro Business field of work and include access to:

- software for financial calculations
- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies or where possible, real situations.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSMB403 Market the small business

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to monitor and improve business performance via a clear marketing strategy integrated into the business plan.

It applies to individuals who operate a small business independently or within a larger organisation. Individuals in this role analyse and interpret market data.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Small and Micro Business

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Develop marketing strategies	1.1 Analyse the business and its key products or services to determine focus of marketing activities, in accordance with objectives of the business plan 1.2 Evaluate customer base and target market for the small

ELEMENT	PERFORMANCE CRITERIA
	business as a basis for marketing objectives and strategies 1.3 Conduct a competitor analysis to inform development of marketing strategies 1.4 Determine marketing objectives in consultation with relevant people and in accordance with the business plan 1.5 Ensure strategies are ethically and culturally appropriate and aligned with customer and industry expectations
2. Determine a marketing mix for the business	2.1 Assess product mix, volumes and pricing opportunities to determine marketing focus and optimise profit 2.2 Evaluate costs and benefits of using different distribution channels or providing different levels of customer service, and consider results in determining marketing mix 2.3 Determine marketing and promotional activities including the role of digital engagement to suit target market 2.4 Consider the customer journey and conversations in determining marketing mix
3. Implement marketing strategies	3.1 Brief those involved in the marketing effort on their roles and responsibilities, to ensure success of marketing strategies 3.2 Plan and implement marketing activities, in accordance with marketing objectives and budgetary requirements 3.3 Consider digital devices, platforms and technologies for effectiveness in implementing marketing activities
4. Monitor and improve marketing performance	4.1 Monitor marketing activities and evaluate business performance according to objectives and targets of the business plan 4.2 Analyse performance gaps and take corrective action or set new targets 4.3 Encourage all relevant people to propose ways to improve marketing performance 4.4 Seek and analyse customer reaction to all aspects of the marketing mix, using culturally appropriate processes, to improve targeting and outcomes 4.5 Conduct ongoing research of customer requirements and expectations in both on-line and off-line environments to identify opportunities for change and improvement 4.6 Identify and respond to opportunities to aid business development through new technologies and different ways of

ELEMENT	PERFORMANCE CRITERIA
	marketing

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.2-2.4, 3.2, 4.1, 4.4, 4.6	Identifies, analyses and evaluates complex information from a range of sources
Writing	1.3, 2.3, 2.5, 3.1, 3.2, 4.4-4.6	Prepares reports and other workplace documentation using structure, layout and terminology appropriate to the audience
Oral Communication	1.3, 3.1, 4.3, 4.4	- Presents ideas and requirements clearly and using language and non-verbal techniques appropriate to audience and environment - Uses questioning and listening to check and confirm understanding
Numeracy	2.1, 2.2, 3.2, 4.2	- Analyses numerical information to determine budgetary requirements and product quantities - Uses a range of calculation methods to evaluate costs and benefits
Navigate the world of work	4.5	Regularly reviews current situation and develops strategies to address improvements in marketing performance
Interact with others	4.3	Recognises importance of building rapport to establish effective working relationships
Get the work done	1.1-1.3, 2.1-2.5, 3.2, 4.1, 4.2	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Implements actions as per plan, making slight adjustments if necessary and addressing some unexpected issues - Makes a range of critical and non-critical decisions in relatively complex situations, taking a range of constraints into account - Identifies concepts, principles and features of approaches in use in other contexts, and redesigns

		these to suit own situation • Uses formal and informal processes to monitor implementation of solutions and reflect on outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSMB403 Market the small business Release 2	BSBSMB403 Market the small business Release 1	Updated to clarify intent	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
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Assessment Requirements for BSBSMB403 Market the small business

Modification History

Release	Comments
Release 2	This version first released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- determine marketing activity focus in line with objectives of the business plan
- evaluate customer base
- understand what is ethically and culturally appropriate
- determine a marketing mix according to market and business needs, including:
 - ability to optimise sales and profit
 - ability to evaluate costs and benefits
 - determine customer needs and promotional activities
- determine marketing strategies, including briefing appropriate personnel on their responsibilities
- identify marketing opportunities in the digital environment
- develop approaches to engage, respond and monitor customers in the digital space
- monitor and evaluate activities and performance, and correct performance gaps
- consult and communicate effectively with relevant people
- research and monitor ongoing changes and improvements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- discuss industry market trends
- identify performance evaluation methods
- explain methods of analysing costs and benefits of marketing strategies
- summarise methods of developing marketing objectives and marketing mix
- compare current digital devices, platforms and technologies for effectiveness in achieving marketing objectives
- outline methods of monitoring customer satisfaction
- identify relevant market analysis and research
- provide a detailed explanation of relevant marketing concepts and methods.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the Management and Leadership – Small and Micro Business field of work and include access to:

- business technology
- software for analysis of data
- workplace documents and case studies or where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSMB404 Undertake small business planning

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to research and develop an integrated business plan for achieving business goals and objectives.

It applies to individuals who operate a small business that operates independently, or as part of a larger organisation. Individuals in this role interpret business information and numerical data competently.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Small and Micro Business

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify elements of the business plan	1.1 Identify purpose of the business plan 1.2 Identify and review essential components of the business plan 1.3 Identify and document business goals and objectives as a basis for measuring business performance

ELEMENT	PERFORMANCE CRITERIA
2. Develop a business plan	2.1 Research resources, legal and compliance requirements, specifically in relation to work health and safety (WHS), in accordance with business goals and objectives 2.2 Research market needs, and market size and potential 2.3 Identify sources and costs of finance, from financial plan, to provide required liquidity and profitability for the business 2.4 Identify methods, from marketing strategies, to promote market exposure of the business 2.5 Identify methods or means of production or operation from production or operations plan to conform with business goals and objectives 2.6 Identify staffing requirements to effectively produce or deliver products and services 2.7 Identify, assess and prioritise internal and external risks 2.8 Identify specialist services and sources of advice, where required, and cost in accordance with available resources
3. Develop strategies for minimising risks	3.1 Identify specific interests and objectives of relevant people and seek and confirm their support of planned business direction 3.2 Identify and develop risk management strategies according to business goals and objectives, and relevant legal requirements 3.3 Develop a contingency plan to address possible areas of non-conformance with the plan

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1-2.7, 3.1, 3.2	Identifies, analyses and evaluates complex workplace documentation during planning process
Writing	1.3, 2.3-2.7, 3.1-3.3	Prepares written reports and workplace documentation that communicate complex information clearly and effectively
Oral	1.1, 3.1	Articulates ideas and requirements clearly and

Communication		creatively based on techniques appropriate to assess business performance
Numeracy	2.2, 2.3, 2.5-2.7	Interprets numerical information to determine prospective markets, resource allocations and business profits/losses
Navigate the world of work	2.1, 3.2	Appreciates implications of legal and regulatory responsibilities related to own work
Interact with others	3.1	Looks for strengths in others, finding ways of working with and building on these and sharing own knowledge and experience freely
Get the work done	1.1, 1.2, 2.1-2.7, 3.2, 3.3	- Uses a combination of formal, logical planning processes and an increasingly intuitive understanding of context to identify relevant information and to evaluate alternative strategies - Implements actions as per plan, making slight adjustments if necessary, and addressing some unexpected issues - Makes a range of critical and non-critical decisions in relatively complex situations, taking a range of constraints into account - Identifies concepts, principles and features of approaches in use in other contexts, and redesigns these to suit own situation - Uses formal and informal processes to monitor implementation of solutions and reflect on outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSMB404 Undertake small business planning Release 2	BSBSMB404 Undertake small business planning Release 1	Updated to clarify intent	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSMB404 Undertake small business planning

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop a business plan which provides for finance, marketing and provision of products or services to facilitate all business goals and objectives
- identify and plan all work health and safety (WHS) and duty of care responsibilities
- identify and assess internal and external risks to the business
- develop risk management strategies including a contingency plan for non-conformance.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- discuss all government legislative requirements relating to business operation, especially in regard to WHS and environmental issues, equal employment opportunity, industrial relations and anti-discrimination
- explain methods of evaluation
- summarise WHS responsibilities and procedures for identifying hazards relevant to the business
- outline planning processes
- describe preparation of a business plan
- identify principles of risk management relevant to small business planning
- outline common risks particular to the small business type or industry
- explain reasons for, and benefits of, business planning

- clarify relevant industry codes of practice
- outline setting goals and objectives
- explain types of business planning – feasibility studies; strategic, operational, financial and marketing planning.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the Management and Leadership – Small and Micro Business field of work and include access to:

- business equipment and resources
- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies or where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSMB412 Introduce cloud computing into business operations

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to understand the fundamentals of internet computing and cloud services. It involves undertaking a basic review of business computing needs and identifying options for introducing cloud computing services into a small business or work area in an organisation.

It applies to individuals who use problem-solving skills and take responsibility for adopting and promoting approaches to improve business operations.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Small and Micro Business

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Review computing needs in the business	1.1 Review current computing resources and use, and document according to business requirements

ELEMENT	PERFORMANCE CRITERIA
	1.2 Identify and discuss future computing needs and potential improvements to business operations with relevant people 1.3 Collate information collected in review, and summarise business computing needs
2. Investigate cloud computing services to meet business needs	2.1 Research fundamentals of cloud computing, types of services offered, and their costs 2.2 Seek assistance from specialist advisors as required, to determine relevant cloud computing services 2.3 Undertake basic cost-benefit analysis for introducing cloud computing 2.4 Identify potential opportunities and risks associated with introducing cloud computing 2.5 Prepare a business case for implementing cloud computing services or other required changes, and seek approval where required
3. Develop a plan to introduce cloud computing	3.1 Prioritise introduction of cloud computing, including short-term and longer-term goals 3.2 Prepare a budget catering for short and long-term priorities, following business format and requirements 3.3 Independently or through services of a specialist advisor, outline steps and activities required to introduce cloud computing into the business
4. Support implementation of the plan	4.1 Communicate and promote key features of the plan to others 4.2 Organise training and coaching to maximise cloud computing potential 4.3 Encourage and support individuals and work groups to become more efficient using cloud computing

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description

Learning	4.2	Actively reinforces workplace learning by encouraging personnel to expand their computing knowledge
Reading	1.1, 2.1	Organises, evaluates and critiques information from a wide variety of textual material
Writing	1.1, 1.3, 2.5, 3.2, 3.3, 4.1	Develops material for a specific audience using clear language and workplace conventions to convey explicit information, requirements and recommendations
Numeracy	2.1, 2.3, 3.2	Analyses numerical information to plan business budgets and analyse and compare IT data
Oral communication	1.2, 2.5, 4.1	- Uses appropriate, detailed and clear language to address key personnel and disseminate information - Uses listening and questioning skills to confirm understanding of requirements
Navigate the world of work	1.1, 1.3, 3.2	- Appreciates implications of legal and regulatory responsibilities related to own work - Adheres to organisational policies and procedures and considers own role for its contribution to broader workplace goals
Interact with others	1.2, 2.2, 3.3, 4.3	- Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective group interaction, influencing direction and taking a leadership role on occasion - May seek expert guidance of others in specific areas
Get the work done	1.2, 1.3, 2.1, 2.2, 2.4, 2.5, 3.1	- Applies formal processes when planning more complex/unfamiliar tasks and producing plans with logically sequenced steps - Applies problem-solving processes when tackling an unfamiliar problem, breaking complex issues into manageable parts and identifying and evaluating several options for action - Uses both formal and informal processes to monitor implementation of solutions and reflect on outcomes for future improvements - Reflects on ways digital systems and tools are used, or could be used, to achieve work goals, and begins to recognise strategic and operational applications

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSMB412 Introduce cloud computing into business operations Release 2	BSBSMB412 Introduce cloud computing into business operations Release 1	Updated to clarify intent	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

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Assessment Requirements for BSBSMB412 Introduce cloud computing into business operations

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- review and analyse business computing use and needs, including equipment and software requirements
- collect and analyse information about cloud computing including:
 - seeking assistance from specialist advisor as required
 - performing cost-benefit analysis
 - identifying potential risks
- make the business case to introduce cloud computing
- prepare a plan and support others to implement cloud computing.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain fundamentals of cloud computing, including key terms and concepts
- outline sources of information about cloud computing for micro or small business, and options specific to the business
- describe how to undertake a cost-benefit analysis and prepare a budget
- summarise business protocols for using services of specialist advisors.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the Management and Leadership – Small and Micro Business field of work and include access to:

- business equipment and resources
- business technology
- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies or where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSUS201 Participate in environmentally sustainable work practices

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to effectively measure current resource use and carry out improvements, including reducing the negative environmental impact of work practices.

It applies to individuals, working under supervision or guidance, who are required to follow workplace procedures and instructions, and work in an environmentally sustainable manner within scope of competency, authority and own level of responsibility.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Industry Capability – Sustainability

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify current resource use	1.1 Identify workplace environmental and resource efficiency issues 1.2 Identify resources used in own work role 1.3 Document and measure current usage of resources using appropriate techniques 1.4 Record and file documentation measuring current usage, using

ELEMENT	PERFORMANCE CRITERIA
	technology (such as software systems) where applicable 1.5 Identify and report workplace environmental hazards to appropriate personnel
2. Comply with environmental regulations	2.1 Follow workplace procedures to ensure compliance 2.2 Report breaches or potential breaches to appropriate personnel
3. Seek opportunities to improve resource efficiency	3.1 Follow organisational plans to improve environmental practices and resource efficiency 3.2 Work as part of a team, where relevant, to identify possible areas for improvements to work practices in own work area 3.3 Make suggestions for improvements to workplace practices in own work area

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 2.1, 3.1	Recognises and interprets textual information to establish job requirements from relevant information
Writing	1.3, 1.4, 1.5, 2.2	Completes documents using required formats
Oral Communication	1.5, 2.2, 3.3	Articulates ideas clearly and uses simple and relevant language to identify and report issues to designated person
Numeracy	1.3	Calculates basic metric measurements to determine resource usage
Navigate the world of work	2.1	Understands and adheres to legal and regulatory responsibilities related to own work
Interact with others	1.5, 2.2, 3.2, 3.3	- Selects and uses appropriate conventions and protocols when communicating with co-workers in range of work contexts - Collaborates and cooperates with others to achieve joint outcomes
Get the work	1.1-1.4, 3.1, 3.3	Implements actions as per plan, taking some responsibility for sequencing and timing of tasks

done		• Uses main features and functions of digital tools to complete work tasks and access information • Analyses current practices to identify opportunities for improvement.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSUS201 Participate in environmentally sustainable work practices	BSBSUS201A Participate in environmentally sustainable work practices	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSUS201 Participate in environmentally sustainable work practices

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- locate and interpret a range of environment/sustainability legislation and procedural requirements
- participate in and support discussions for an improved resource efficiency process
- identify, document and measure usage of resources
- collaborate with team members on suggestions for improving workplace practices.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify environmental and resource hazards/risks as well as environmental or sustainability legislation, regulations and codes of practice applicable to own role
- outline sustainability requirements in the workplace
- identify reporting channels and procedures to report breaches and potential issues
- identify where to find environmental and resource efficiency systems and procedures.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the sustainability field of work and include access to:

- documentation, information and resources related to workplace environmental and resource efficiency issues
- office equipment and resources
- case studies and, where possible, real situations

- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSUS501 Develop workplace policy and procedures for sustainability

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to develop and implement a workplace sustainability policy and to modify the policy to suit changed circumstances.

It applies to individuals with managerial responsibilities who undertake work developing approaches to create, monitor and improve strategies and policies within workplaces and engage with a range of relevant stakeholders and specialists.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Industry Capability – Sustainability

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Develop workplace sustainability policy	1.1 Define scope of sustainability policy 1.2 Gather information from a range of sources to plan and develop policy 1.3 Identify and consult stakeholders as a key component of the policy development process 1.4 Include appropriate strategies in policy at all stages of work for

ELEMENT	PERFORMANCE CRITERIA
	minimising resource use, reducing toxic material and hazardous chemical use and employing life cycle management approaches 1.5 Make recommendations for policy options based on likely effectiveness, timeframes and cost 1.6 Develop policy that reflects the organisation's commitment to sustainability as an integral part of business planning and as a business opportunity 1.7 Agree to appropriate methods of implementation, outcomes and performance indicators
2. Communicate workplace sustainability policy	2.1 Promote workplace sustainability policy, including its expected outcome, to key stakeholders 2.2 Inform those involved in implementing the policy about expected outcomes, activities to be undertaken and assigned responsibilities
3. Implement workplace sustainability policy	3.1 Develop and communicate procedures to help implement workplace sustainability policy 3.2 Implement strategies for continuous improvement in resource efficiency 3.3 Establish and assign responsibility for recording systems to track continuous improvements in sustainability approaches
4. Review workplace sustainability policy implementation	4.1 Document outcomes and provide feedback to key personnel and stakeholders 4.2 Investigate successes or otherwise of policy 4.3 Monitor records to identify trends that may require remedial action and use to promote continuous improvement of performance 4.4 Modify policy and or procedures as required to ensure improvements are made

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description

Reading	1.1, 1.2, 4.2, 4.3	Identifies, analyses and evaluates complex textual information to determine legislative and regulatory requirements, trends and outcomes
Writing	1.2-1.7, 2.1, 2.2, 3.1, 3.3, 4.1, 4.3, 4.4	Researches, plans and prepares documentation using format and language appropriate to context, organisational requirements and audience
Oral Communication	1.2, 1.3, 2.1, 2.2, 3.1, 4.1	- Presents information and seeks advice using language appropriate to audience - Participates in discussions using listening and questioning to elicit the views of others and to clarify or confirm understanding
Numeracy	1.5, 4.3	Interprets and uses mathematical equations to calculate numerical information relating to time durations and costs
Navigate the world of work	1.1-1.6, 3.1, 4.4	Develops, monitors and modifies organisational policies and procedures in accordance with legislative requirements and organisation goals
Interact with others	1.2, 1.3, 2.1, 2.2, 3.1, 3.3, 4.1, 4.3	- Selects and uses appropriate conventions and protocols when communicating with internal and external stakeholders to seek or share information - Plays a lead role in consulting and negotiating positive outcomes with a range of stakeholders
Get the work done	1.2, 1.4-1.7, 2.3, 2.4, 3.1, 3.2, 3.3, 3.5, 3.6, 4.1, 4.3, 4.4	- Plans, organises and implements work activities of self and others that ensure compliance with organisational policies and procedures, and legislative requirements - Sequences and schedules complex activities, monitors implementation, and manages relevant communication - Uses systematic, analytical processes in relatively complex situations, setting goals, gathering relevant information, and identifying and evaluating options against agreed criteria - Evaluates outcomes of decisions to identify opportunities for improvement

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSUS501 Develop workplace policy and	BSBSUS501A Develop workplace policy and procedures	Updated to meet Standards for Training Packages	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
procedures for sustainability	for sustainability	Minor edits to clarify performance criteria	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSUS501 Develop workplace policy and procedures for sustainability

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- scope and develop organisational policies and procedures that comply with legislative requirements and support the organisation's sustainability goals covering at a minimum:
 - minimising resource use
 - resource efficiency
 - reducing toxic material and hazardous chemical use
 - employing life cycle management approaches
 - continuous improvement
- plan and implement sustainability policy and procedures including:
 - agreed outcomes
 - performance indicators
 - activities to be undertaken
 - assigned responsibilities
 - record keeping, review and improvement processes
- consult and communicate with relevant stakeholders to generate engagement with sustainability policy development, implementation and continuous improvement
- review and improve sustainability policies.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the environmental or sustainability legislation, regulations and codes of practice applicable to the organisation identify internal and external sources of information and explain how they can be used to plan and develop the organisation's sustainability policy

- explain policy development processes and practices
- outline organisational systems and procedures that relate to sustainability
- outline typical barriers to implementing policies and procedures in an organisation and possible strategies to address them.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the sustainability field of work and include access to:

- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBWOR301 Organise personal work priorities and development

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to organise own work schedules, to monitor and obtain feedback on work performance and to maintain required levels of competence.

This unit applies to individuals who exercise discretion and judgement and apply a broad range of competencies in various work contexts.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Industry Capability – Workplace Effectiveness

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Organise and complete own work schedule	1.1 Ensure that work goals, objectives or Key Performance Indicators (KPIs) are understood, negotiated and agreed in accordance with organisational requirements 1.2 Assess and prioritise workload to ensure tasks are completed within identified timeframes 1.3 Identify factors affecting the achievement of work objectives and incorporate contingencies into work plans 1.4 Use business technology efficiently and effectively to manage

ELEMENT	PERFORMANCE CRITERIA
	and monitor scheduling and completion of tasks
2. Monitor own work performance	2.1 Accurately monitor and adjust personal work performance through self assessment to ensure achievement of tasks and compliance with legislation and work processes or KPIs 2.2 Ensure that feedback on performance is actively sought and evaluated from colleagues and clients in the context of individual and group requirements 2.3 Routinely identify and report on variations in the quality of and products and services according to organisational requirements 2.4 Identify signs of stress and effects on personal wellbeing 2.5 Identify sources of stress and access appropriate supports and resolution strategies
3. Co-ordinate personal skill development and learning	3.1 Identify personal learning and professional development needs and skill gaps using self assessment and advice from colleagues and clients in relation to role and organisational requirements 3.2 Identify, prioritise and plan opportunities for undertaking personal skill development activities in liaison with work groups and relevant personnel 3.3 Access, complete and record professional development opportunities to facilitate continuous learning and career development 3.4 Incorporate formal and informal feedback into review of further learning needs

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	3.1-3.4	Employs a range of approaches and investigative techniques to source the knowledge necessary to arrange personal learning experiences
Reading	1.1, 1.2, 2.1	Interprets textual information to determine organisation's procedures, own work performance and objectives

Writing	1.3, 1.4, 2.3, 3.1, 3.2, 3.3	Prepares written reports and workplace documents that communicate information clearly and effectively
Oral Communication	2.2, 2.3, 3.1, 3.2	- Clearly gives and receives feedback using specific and relevant language - Uses listening and questioning techniques to confirm understanding
Numeracy	1.1, 1.3	Understands responsibilities and scope of role and complies with organisational policies, procedures and protocols
Interact with others	1.1, 2.2, 2.3, 3.1, 3.2	- Selects the appropriate form, channel and mode of communication for a specific purpose relevant to own role - Fosters and nurtures a culture of constructive and respectful feedback - Proactively collaborates with others to achieve specific goals
Get the work done	1.2, 1.3, 1.4, 2.4, 2.5, 3.2	- Plans and organises work commitments to ensure deadlines and objectives are met - Uses formal analytical thinking techniques to recognise and respond to routine problems - Uses digital systems and tools to enter, store and monitor information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBWOR301 Organise personal work priorities and development	BSBWOR301B Organise personal work priorities and development	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBWOR301 Organise personal work priorities and development

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare a work plan according to organisational requirements and work objectives
- use business technology to schedule, prioritise and monitor completion of tasks in a work plan
- assess and prioritise own work load and deal with contingencies
- monitor and assess personal performance against job role requirements by seeking feedback from colleagues and clients
- identify personal development needs and access, complete and record skill development and learning.

Note: if a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline key provisions of legislation that relate to own work role
- describe goals, objectives or key performance indicators of own work role
- explain ways to elicit, analyse and interpret feedback when communicating with other people in the workplace
- explain the principles and techniques of goal setting, measuring performance, time management and personal assessment of learning and development needs
- explain signs and sources of stress and strategies to deal with stress in the workplace
- identify methods to identify and prioritise personal learning needs.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the industry capability - workplace effectiveness field of work and include access to:

- office equipment and resources
- work schedules and performance improvement plans
- workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBWOR404 Develop work priorities

Modification History

Release	Comments
Release 2	This version first released with BSB Business Services Training Package Version 1.1. Version created to correct mapping table information
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to monitor and obtain feedback on own work performance and access learning opportunities for professional development.

This unit applies to individuals who are required to design their own work schedules and work plans and to establish priorities for their work. They will typically hold some responsibilities for the work of others and have some autonomy in relation to their own role.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Industry Capability – Workplace Effectiveness

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan and complete own work schedule	1.1 Prepare workgroup plans which reflect consideration of resources, client needs and workgroup targets 1.2 Analyse and incorporate work objectives and priorities into personal schedules and responsibilities

ELEMENT	PERFORMANCE CRITERIA
	1.3 Identify factors affecting the achievement of work objectives and establish contingencies and incorporate them into work plans 1.4 Efficiently and effectively use business technology to manage and monitor planning completion and scheduling of tasks
2. Monitor own work performance	2.1 Identify and analyse personal performance through self-assessment and feedback from others on the achievement of work objectives 2.2 Seek and evaluate feedback on performance from colleagues and clients in the context of individual and group requirements 2.3 Routinely identify and report on variations in the quality of service and performance in accordance with organisational requirements
3. Co-ordinate professional development	3.1 Assess personal knowledge and skills against organisational benchmarks to determine development needs and priorities 3.2 Research and identify sources and plan for opportunities for improvement in consultation with colleagues 3.3 Use feedback to identify and develop ways to improve competence within available opportunities 3.4 Identify, access and complete professional development activities to assist career development 3.5 Store and maintain records and documents relating to achievements and assessments in accordance with organisational requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	3.1, 3.2, 3.3, 3.4	Develops strategies to reflect on own performance, obtain feedback, and plan and source professional development opportunities
Reading	1.2, 2.1, 2.3, 3.1, 3.5	Recognises and interprets textual information from relevant sources to understand organisation's policies and practices

Writing	1.1, 1.3, 2.2, 2.3, 3.2, 3.5	Prepares written reports and workplace documentation that communicate complex information clearly and effectively
Oral Communication	2.2, 2.3, 3.2	- Provides or seeks information using language suitable to audience and context - Employs listening and questioning techniques to confirm understanding
Numeracy	1.1, 1.2, 1.3	Interprets numerical information related to budgets and timeframes
Navigate the world of work	1.2, 2.1, 2.3, 3.1, 3.5	Identifies and understands roles and responsibilities in relation to organisational objectives, policies and procedures
Interact with others	2.2, 2.3, 3.2	- Selects and uses appropriate practices when communicating with internal and external stakeholders to seek or share information - Establishes and builds rapport and relationships with others to foster a culture of trust and honesty in communications
Get the work done	1.1-1.4, 2.3, 3.1, 3.2, 3.4, 3.5	- Plans, organises and implements tasks to meet organisational requirements - Systematically gathers and analyses information and evaluates options in order to anticipate potential problems and develop contingency plans - Uses the main features and functions of digital technologies and tools to complete work tasks efficiently and effectively

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBWOR404 Develop work priorities	BSBWOR404B Develop work priorities	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBWOR404 Develop work priorities

Modification History

Release	Comments
Release 2	This version first released with BSB Business Services Training Package Version 1.1. Version created to correct mapping table information
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare and communicate own work plan
- schedule work objectives and tasks to support the achievement of the workgroup goals
- review own work performance against workgroup objectives through self-assessment and seeking and acting on feedback from clients and colleagues
- plan and access learning opportunities to extend personal work competencies.

Note: if a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain how business technology applications can be used to schedule tasks and plan work
- explain techniques to prepare personal plans and establish priorities
- identify methods to identify and prioritise personal learning needs
- outline a range of professional development options
- explain methods to elicit, analyse and interpret feedback
- provide a detailed explanation of methods that can be used to evaluate own performance.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the industry capability - workplace effectiveness field of work and include access to:

- workplace documentation including policies and procedures, and benchmarks for work group productivity and performance
- workplace equipment and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBWOR501 Manage personal work priorities and professional development

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to create systems and process to organise information and prioritise tasks.

It applies to individuals working in managerial positions who have excellent organisational skills. The work ethic of individuals in this role has a significant impact on the work culture and patterns of behaviour of others as managers at this level are role models in their work environment.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Industry Capability – Workplace Effectiveness

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Establish personal work goals	1.1 Serve as a positive role model in the workplace through personal work planning 1.2 Ensure personal work goals, plans and activities reflect the organisation's plans, and own responsibilities and accountabilities 1.3 Measure and maintain personal performance in varying work conditions, work contexts and when contingencies occur

ELEMENT	PERFORMANCE CRITERIA
2. Set and meet own work priorities	2.1 Take initiative to prioritise and facilitate competing demands to achieve personal, team and organisational goals and objectives 2.2 Use technology efficiently and effectively to manage work priorities and commitments 2.3 Maintain appropriate work-life balance, and ensure stress is effectively managed and health is attended to
3. Develop and maintain professional competence	3.1 Assess personal knowledge and skills against competency standards to determine development needs, priorities and plans 3.2 Seek feedback from employees, clients and colleagues and use this feedback to identify and develop ways to improve competence 3.3 Identify, evaluate, select and use development opportunities suitable to personal learning style/s to develop competence 3.4 Participate in networks to enhance personal knowledge, skills and work relationships 3.5 Identify and develop new skills to achieve and maintain a competitive edge

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	3.1, 3.2, 3.3, 3.4, 3.5	Investigates and uses a range of strategies to develop personal competence
Reading	1.2, 3.1, 3.2	Analyses and interprets textual information from organisational policies and practices or feedback to inform personal development planning
Writing	3.2	Uses feedback to prepare reports that summarise ways to improve competence
Oral Communication	3.2	Uses active listening and questioning to seek and receive feedback
Navigate the world of work	1.2, 2.1	- Understands how own role contributes to broader organisational goals - Considers organisational protocols when planning own career development

Interact with others	1.1, 3.2, 3.4	• Selects and uses appropriate conventions and protocols when communicating with diverse stakeholders • Uses interpersonal skills to establish and build positive working relationships with others
Get the work done	1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 3.1	• Plans and prioritises tasks in order to meet deadlines, manage role responsibilities and to manage own personal welfare • Identifies and uses appropriate technology to improve work efficiency

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBWOR501 Manage personal work priorities and professional development	BSBWOR501B Manage personal work priorities and professional development	Updated to meet Standards for Training Packages Minor edits to clarify Performance Criteria	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBWOR501 Manage personal work priorities and professional development

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use business technology to create and use systems and processes to organise and prioritise tasks and commitments
- measure and maintain personal work performance including assessing competency against competency standards and seeking feedback
- maintain an appropriate work-life balance to manage personal health and stress
- participate in networks
- develop a personal development plan which includes career objectives and an action plan
- develop new skills.

Note: if a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain principles and techniques involved in the management and organisation of:
 - performance measurement
 - personal behaviour, self-awareness and personality traits identification
 - a personal development plan
 - personal goal setting
 - time
- discuss management development opportunities and options for self
- describe methods for achieving a healthy work-life balance
- outline organisation's policies, plans and procedures
- explain types of learning style/s and how they relate to the individual
- describe types of work methods and practices that can improve personal performance.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the industry capability - workplace effectiveness field of work and include access to:

- workplace equipment and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBWOR502 Lead and manage team effectiveness

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to lead teams in the workplace and to actively engage with the management of the organisation.

It applies to individuals working at a managerial level who facilitate work teams and build a positive culture within their work teams. At this level, work will normally be carried out using complex and diverse methods and procedures requiring the exercise of considerable discretion and judgement, using a range of problem solving and decision making strategies.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Industry Capability – Workplace Effectiveness

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Establish team performance plan	1.1 Consult team members to establish a common understanding of team purpose, roles, responsibilities and accountabilities in accordance with organisational goals, plans and objectives 1.2 Develop performance plans to establish expected outcomes, outputs, key performance indicators (KPIs) and goals for work team 1.3 Support team members in meeting expected performance

ELEMENT	PERFORMANCE CRITERIA
	outcomes
2. Develop and facilitate team cohesion	2.1 Develop strategies to ensure team members have input into planning, decision making and operational aspects of work team 2.2 Develop policies and procedures to ensure team members take responsibility for own work and assist others to undertake required roles and responsibilities 2.3 Provide feedback to team members to encourage, value and reward individual and team efforts and contributions 2.4 Develop processes to ensure that issues, concerns and problems identified by team members are recognised and addressed
3. Facilitate teamwork	3.1 Encourage team members and individuals to participate in and to take responsibility for team activities, including communication processes 3.2 Support the team in identifying and resolving work performance problems 3.3 Ensure own contribution to work team serves as a role model for others and enhances the organisation's image for all stakeholders
4. Liaise with stakeholders	4.1 Establish and maintain open communication processes with all stakeholders 4.2 Communicate information from line manager/management to the team 4.3 Communicate unresolved issues, concerns and problems raised by team members and follow-up with line manager/management and other relevant stakeholders 4.4 Evaluate and take necessary corrective action regarding unresolved issues, concerns and problems raised by internal or external stakeholders

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description

Reading	1.1, 4.4	Analyses and interprets textual information from the organisation's policies, goals and objectives to establish team goals or to determine corrective action
Writing	1.2, 2.1, 2.2, 2.4, 4.2, 4.3, 4.4	Prepares written reports and workplace documentation that communicate complex information clearly and effectively
Oral Communication	1.1, 2.3, 3.1, 4.1, 4.2, 4.3	- Engages in discussions or provides information using appropriate vocabulary and non-verbal features - Uses listening and questioning techniques to confirm understanding and to engage the audience
Navigate the world of work	1.1, 2.1, 2.2, 3.3	- Understands how own role contributes to broader organisational goals - Modifies or develops policies and procedures to achieve organisational goals
Interact with others	1.1, 1.3, 2.2, 2.3, 3.1, 3.2, 4.2, 4.3	- Selects and uses appropriate conventions and protocols when communicating with diverse stakeholders - Uses interpersonal skills to gain trust and confidence of team and provides feedback to others in forms that they can understand and use - Adapts personal communication style to build positive working relationships and to show respect for the opinions, values and particular needs of others - Plays a lead role in situations requiring effective collaboration, demonstrating high level conflict resolution skills and ability to engage and motivate others
Get the work done	1.2, 2.1, 2.2, 2.4, 3.2, 4.1, 4.3, 4.4	- Develops, implements and monitors plans and processes to ensure team effectiveness - Monitors and actively supports processes and development activities to ensure the team is focused on work outcomes - Plans for unexpected outcomes and implements creative responses to overcome challenges

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBWOR502 Lead and manage team effectiveness	BSBWOR502B Ensure team effectiveness	Updated to meet Standards for Training Packages	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
		Title change	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBWOR502 Lead and manage team effectiveness

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use leadership techniques and strategies to facilitate team cohesion and work outcomes including:
 - encouraging and fostering shared understanding of purpose, roles and responsibilities
 - identifying and resolving problems
 - providing feedback to encourage, value and reward others
 - modelling desired behaviour and practices
- develop policies and procedures to ensure team members take responsibility for own work and assist others to undertake required roles and responsibilities
- establish processes to address issues and resolve performance issues
- support team to meet expected performance outcomes including providing formal and informal learning opportunities as needed
- develop performance plans with key performance indicators (KPIs), outputs and goals for individuals or the team which incorporate input from stakeholders
- communicate effectively with a range of stakeholders about team performance plans and team performance
- facilitate two-way flow of information between team and management relevant to team performance
- evaluate and take necessary corrective action regarding unresolved issues, concerns and problems raised by internal or external stakeholders.

Note: if a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain how group dynamics can support or hinder team performance

- outline strategies that can support team cohesion, participation and performance
- explain strategies for gaining consensus
- explain issue resolution strategies.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the industry capability - workplace effectiveness field of work and include access to:

- workplace documents
- case studies and, where possible, real situations
- office equipment and resources
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

ICTDBS504 Integrate database with a website

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to ensure the database is integrated with a website.

It applies to individuals employed as web developers who are responsible for creating data-driven web applications.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Database

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Connect to the database	1.1 Identify site data needs from the technical requirements 1.2 Connect to the database from a web application using a web development language
2. Retrieve data from database and display on web pages	2.1 Retrieve data using structured query language (SQL) 2.2 Display the data in the most appropriate control 2.3 Format the data so that it is displayed in the most effective way

ELEMENT	PERFORMANCE CRITERIA
3. Update the database data from user input	3.1 Update the existing data stored in the database with user-supplied input 3.2 Insert the data in the database with user-supplied input 3.3 Delete the data stored in the database 3.4 Validate the data and check for errors

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1, 3.3, 3.4	Interprets textual information from the sources in order to identify relevant and key information
Writing	1.2, 2.3, 3.1, 3.2	Writes and edits computer input data, code and technical data, ensuring correct syntax and accuracy
Get the work done	All	- Uses systematic, analytical processes in complex, non-routine situations, setting goals, gathering relevant information, and identifying, and evaluating options against agreed criteria - Uses analytical processes to decide on a course of action, and establishes the criteria for deciding between different options - Demonstrates a sophisticated understanding of principles, concepts, language and practices associated with the digital world, and uses these to connect to a database from a web application, retrieving, displaying and updating data

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalent status
ICTDBS504 Integrate database with a website	ICADBS504A Integrate database with a website	Updated to meet Standards for Training Packages.	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalent status
		Minor edits to clarify intent of the performance criteria	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTDBS504 Integrate database with a website

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- access database using a web development language
- retrieve and display web-based data
- update web-based data.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe a database structure
- outline internet technology as it relates to the use of databases
- identify and apply programming control structures, including object-oriented programming and structured query language (SQL)
- explain web programming concepts, including:
 - authentication and web security
 - hypertext transfer protocol (HTTP)
 - session management
 - defining the principles of stateless programming.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the database field of work, and include access to:

- equipment

- industry software packages
- the requirements documentation
- a web server
- a database
- the web development environment
- browsers.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK301 Provide network systems administration

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to technically manage the elements of a network, including contributing to a disaster recovery plan.

It applies to individuals working as frontline technical support personnel responsible for administering a network.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Provide client access and security	1.1 Provide logons, passwords and applications file access to users, and prepare the documentation in line with organisational requirements 1.2 Examine the records of user accounts, to determine access privileges and usage 1.3 Take the necessary action to ensure the maintenance of system integrity and security
2. Provide the input into	2.1 Provide input into the organisation's disaster recovery plan

ELEMENT	PERFORMANCE CRITERIA
and disseminate the disaster recovery plan	2.2 Disseminate the disaster recovery plan to users, as required
3. Monitor the network performance	3.1 Perform the diagnostic tests associated with administering the network or system 3.2 Analyse and respond to diagnostic information 3.3 Monitor software usage, including any inappropriate or illegal use 3.4 Delete any illegal software from the system 3.5 Monitor the hardware response time, and other performance indicators 3.6 Determine and action, methods for improving the network and systems efficiency, according to the organisational guidelines

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 3.6	Recognises and interprets textual information from organisational guidelines to establish the job requirements
Writing	1.1	Uses specific and relevant language to complete workplace documentation
Oral Communication	1.1, 2.1	Articulates information clearly, using specific and relevant language suitable to the audience, to convey requirements, and listening and questioning techniques, to confirm understanding
Numeracy	3.2	Interprets numerical data to monitor network operations
Interact with others	2.2	Selects the appropriate form, channel and mode of communication for a specific purpose, relevant to own role
Get the work done	1.3, 3.1, 3.2, 3.3, 3.6	Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency, and

		considering how to link with the work of others • Understands the purposes, specific functions and key features of common digital systems, and tools, and operates them effectively to complete routine tasks • Responds to highly obvious routine problems, using step by step instruction and procedures, or by a trial and error process, for non-critical situations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK301 Provide network systems administration	ICANWK301A Provide network systems administration	Updated to meet Standards for Training Packages.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK301 Provide network systems administration

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- sustain the operation of the network through the maintenance of network integrity, and by performing diagnostic tests
- contribute to the formulation of a disaster recovery plan, and provide the client with an optimised network that complies with the organisational guidelines
- implement network and systems efficiency, according to organisational guidelines
- provide the appropriate access to the network for users
- maintain, limit or enhance user access, according to authorised requests.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the network's operating system
- outline the different approaches to backing-up, and restoring, computer data
- describe the key elements contained in a disaster recovery policy
- describe the features of network file and folder permissions
- outline the vendor service-level agreement
- summarise operating systems supported by the organisation, their functions and basic features
- outline the organisation's access and security procedures
- identify and describe the organisational and technical systems
- describe the organisational procedures for protection against, and elimination, of computer viruses
- describe the policies and procedures for deleting, restoring and archiving files

- describe the procedures for creating logons
- outline the security, and network, guidelines and procedures
- state the responsibilities for software copyright.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- a live network
- systems administration tools currently used in the industry
- the organisational policy and procedures

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK302 Determine and action network problems

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to document network related problems, determine solutions, or escalate problems to a new support level.

It applies to individuals, working as frontline technical support personnel, who maintain network continuity by isolating and rectifying network problems as they arise.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine client requirements and identify if problem exists	1.1 Log calls from help-desk support staff 1.2 Determine and document problem based on client requirements
2. Determine whether problem is covered by policy	2.1 Verify the scope and coverage of maintenance and technical support agreements relative to the problem and client requirements 2.2 Provide assistance according to organisational guidelines

ELEMENT	PERFORMANCE CRITERIA
3. Carry out maintenance support on identified problem	3.1 Conduct diagnostic tests around identified problem 3.2 Complete maintenance according to organisational guidelines 3.3 Obtain new components as part of the resolution, where necessary 3.4 Store or dispose of components according to organisational and environmental guidelines
4. Prepare maintenance report and confirm solution	4.1 Prepare maintenance report according to organisational guidelines and support agreements 4.2 Refer unresolved maintenance requirements to appropriate higher level service area 4.3 Follow up with the client to determine solution success and close the report

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.1, 2.2, 3.2, 3.4, 4.1	Recognises and interprets textual information from organisational guidelines and support agreements to establish the job requirements
Writing	1.1, 1.2, 4.1	Uses industry-specific language to document problems and prepare maintenance reports in line with organisational guidelines and support agreements
Oral Communication	4.2, 4.3	- Provides clear explanations using language suitable to audience to discuss unresolved challenges - Uses listening and questioning techniques to confirm understanding
Navigate the world of work	2.2, 3.4	Complies with explicit organisational policies and procedures
Get the work done	1.2, 2.1, 2.2, 3.1-3.4, 4.3	Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency, and

		considering how to link with the work of others • Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks • May reflect on outcomes and identify what worked, or develop an improved approach for future situations • Initiates standard diagnostic procedures when responding to familiar and unfamiliar problems within immediate context and seeks input from others when problems remain unresolved

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK302 Determine and action network problems	ICANWK302A Identify and resolve network problems	Updated to meet Standards for Training Packages. The title has been edited to correct the wording to that of the original competency intent.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK302 Determine and action network problems

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- document network related problems and determine the required resources
- solve client problems or escalate the problem according to organisational guidelines
- maintain the network with minimal disruption to clients.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain environmentally sound recycling and disposal procedures
- identify and summarise common networking procedures for:
 - call logging
 - contracting and maintenance requirements
 - problem escalation procedures
- outline inventory processes
- describe technical features and functions of network hardware and software systems
- describe common network problems relating to organisational information
- describe agreements used for technical support.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- a network

- hardware
- diagnostic tools, components and software
- records and reports
- organisational guidelines and procedures.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK303 Configure and administer a network operating system

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit defines the skills and knowledge required to create the network configuration required by a client and to set up and use administrative tools to manage the network.

It applies to individuals working as frontline technical support personnel who are required to maintain network continuity through changing requirements.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Assess network features	1.1 Determine organisational policies and administration arrangements used to administer the network 1.2 Determine the type of network operating system (NOS) and interfaces used by the existing network and potential compatibility issues caused by integration of other networks 1.3 Identify the risks associated with administration of a network to minimise the loss of data or service during

ELEMENT	PERFORMANCE CRITERIA
	operations 1.4 Determine network administration tools that can be used with the NOS to manage network performance and enforce organisational policies
2. Administer and support the system using administration interfaces	2.1 Use interfaces to format hard drives, set up security restrictions and establish user log-in information to administer a basic network 2.2 Use administration tools to develop a map of system interaction to determine the data required by particular users and how often the data is accessed 2.3 Examine existing applications and software, and plan required upgrades or reconfigurations to new system or applications 2.4 Test reconfiguration for successful interface with existing system to ensure compatibility
3. Set up and manage the network file system	3.1 Create a required file and folder structure using appropriate administration and system tools 3.2 Set the security, access and sharing of file system to meet user requirements 3.3 Identify and implement the virus protection requirements for the network in line with organisational procedures 3.4 Test and document the file system to ensure that appropriate access is available to the user groups according to organisational standards
4. Administer user services and user accounts	4.1 Determine the user services required, and implement using the appropriate administration and system tools 4.2 Create users and groups as required to facilitate user security and network access according to user authorisation 4.3 Verify successful access by users to authorised network data and resources, and record outcomes 4.4 Set or modify user settings to ensure compliance with security and access policies 4.5 Review procedures and take action to ensure that users who are no longer part of the organisation have their accounts disabled, deleted or modified
5. Provide and support backup security	5.1 Scan and clean the network of viruses before performing backup of the network

ELEMENT	PERFORMANCE CRITERIA
	5.2 Determine security risks to which data is exposed and provide appropriate prevention methods and recovery processes 5.3 Report identified security risks to appropriate person 5.4 Implement systems to provide backup and service restoration capability in the event of a disaster, according to organisational policies 5.5 Document and disseminate the disaster recovery procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.4, 3.2-3.4, 4.4, 4.5, 5.4	Recognises and interprets information from organisational policies and procedures to establish the job requirements
Writing	3.4, 4.3, 5.5	Uses specific and relevant language to document new file systems, user access and disaster recovery procedures
Oral Communication	5.3	Articulates information clearly using specific and relevant language suitable to audience to convey requirements, and uses listening and questioning techniques to confirm understanding
Navigate the world of work	1.1, 3.3, 5.4	Complies with explicit organisational policies and procedures
Interact with others	5.3, 5.5	Selects the appropriate form, channel and mode of communication for a specific purpose relevant to own role
Get the work done	1.1-1.4, 2.1-2.4, 3.1-3.4, 4.2-4.5, 5.1, 5.2, 5.4	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency, and considering how to link with the work of others - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks

		• May reflect on outcomes and identify what worked, or develop an improved approach for future situations • Initiates standard diagnostic procedures when responding to familiar and unfamiliar problems within immediate context and seeks input from others when problems remain unresolved

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK303 Configure and administer a network operating system	ICANWK303A Configure and administer a network operating system	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK303 Configure and administer a network operating system

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use network administrative tools to carry out system administration tasks
- manage the network file system
- create the network configuration required by the client
- provide user services and user accounts
- provide backup and service restoration capability.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe antivirus software, its operation, installation and update procedures
- summarise current industry standard network operating system (NOS)
- outline the facilities available in the operating environment
- describe the features and capabilities of networking technologies
- explain the implementation of network security in a local area network (LAN) including:
 - file and folder permissions
 - users and group settings
- provide a summary of monitoring aspects of network performance or traffic including:
 - system administration tools
 - third-party tools.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- user network requirements
- antivirus software
- network administration tools
- a live network with a representative range of networked environments and operating systems
- a server
- technical records, organisational policies, access policy and documentation.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK304 Administer network peripherals

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to manage an environment of networked peripheral devices, in order to provide services to client users.

It applies to individuals working as frontline technical support personnel responsible for connecting, maintaining and administering peripheral devices attached to networks.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Install peripherals to a network	1.1 Plan the location of peripherals to provide appropriate services to users and to take work health and safety (WHS) standards into consideration 1.2 Connect peripherals to network, using vendor approved method and technology 1.3 Connect peripherals to computers in the network using parallel, serial or other direct connection methods 1.4 Add peripheral accessories or upgrades to printer, such as

ELEMENT	PERFORMANCE CRITERIA
	memory or high-volume paper trays 1.5 Test peripherals for correct operation
2. Configure peripheral services to manage peripherals	2.1 Install software required to manage local and network connected peripherals 2.2 Use meaningful names for peripherals and control queues 2.3 Configure security and access to allow appropriate users to make use of peripherals 2.4 Configure workstation for peripherals to allow applications to work with peripherals
3. Administer and support peripheral services	3.1 Assign priority to control queues 3.2 Use peripheral management software supplied as part of the network operating system (NOS) or by third parties 3.3 Create templates for use on the network 3.4 Configure settings on the network to create maintenance schedules, usage logs, and cost centre usage statistics 3.5 Demonstrate to the user the methods for using peripheral services from their application or workstation
4. Maintain peripherals and fix common problems	4.1 Establish and follow a regular maintenance schedule as recommended by peripheral manufacturer 4.2 Replace consumables and components when required 4.3 Fix peripheral mishaps and malfunctions 4.4 Monitor peripheral usage and traffic and recommend additional peripherals if needed 4.5 Determine failures of peripheral services or devices and rectify as required

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	4.1	Recognises and interprets textual information from manufacturers guidelines to establish and follow a

		regular maintenance schedule
Writing	2.2, 4.1	Uses specific and relevant language when naming a peripheral device or creating new profiles
Oral Communication	3.5	- Articulates information clearly using specific and relevant language suitable to audience to convey information - Uses listening and questioning techniques to confirm understanding
Navigate the world of work	1.1	Takes personal responsibility for adherence to legal/regulatory responsibilities relevant to own work context with specific reference to work health and safety (WHS) requirements
Interact with Others	3.5	- Uses a limited range of accepted practices for communicating in a work environment - Recognises common cultural and other differences of people in the work context and makes adjustments in addressing these differences
Get the work done	1.1, -1.5, 2.1- 2.4, 3.1-3.5, 4.2-4.5	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency, and considering how to link with the work of others - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Recognises and takes responsibility for addressing predictable and some less predictable problems, including equipment services or devices malfunctions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK304 Administer network peripherals	ICANWK304A Administer network peripherals	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK304 Administer network peripherals

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- plan and install peripherals
- connect and test peripherals to network
- manage the use of peripheral services with workstations
- maintain networked peripherals according to a maintenance schedule
- rectify faulty peripheral services or devices.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify and describe common network peripherals and their configuration
- identify and summarise current industry standards for network peripherals
- outline the general construction and operation of peripheral devices to facilitate troubleshooting.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry and include access to:

- a range of peripherals
- network administration tools
- a live network with a representative range of networked client server environments and operating systems

- technical records, organisational policies and documentation.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK305 Install and manage network protocols

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to install and manage network protocols in a networking environment.

It applies to individuals with competent information and communications technology (ICT) skills, working as network administrators who are required to ensure that appropriate protocols have been installed in networks to allow user functionality and maintenance.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Install and manage network protocols	1.1 Select, test and validate appropriate network protocol services 1.2 Design a network addressing system, with subnet and host IDs, including appropriate devices 1.3 Configure hosts and workstations to use IP addresses either manually or through automatic allocation of addresses, such as found with dynamic host configuration protocol (DHCP)
2. Identify network	2.1 Review a range of well-known network protocol applications

ELEMENT	PERFORMANCE CRITERIA
protocol applications	2.2 Evaluate client user requirement and recommend network protocol services 2.3 Apply internet protocol (IP) addressing scheme according to approved policy and procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.2, 2.3	Recognises and interprets textual information, including technical manuals, to establish the job requirements
Writing	2.2	Uses specific and relevant language to document new file systems, user access and disaster recovery procedures
Oral Communications	2.2	- Articulates clearly using specific and relevant language suitable to audience to convey requirements - Uses listening and questioning techniques to confirm understanding
Navigate the world of work	2.3	- Complies with explicit organisational policies and procedures - Ensures knowledge of legislative requirements and products is kept up to date
Get the work done	1.1-1.3, 2.1	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency, and considering how to link with the work of others - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Initiates standard procedures when developing and refining configuration protocols

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK305 Install and manage network protocols	ICANWK305A Install and manage network protocols	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK305 Install and manage network protocols

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- configure, test and validate network protocols in order to facilitate interconnectivity
- install and manage network protocols in a network, and troubleshoot problems.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe the client business domain, including client organisation structure and business functionality
- list current communications technologies and their associated protocols
- outline current industry accepted hardware and software products, and general features and capabilities
- summarise network protocols currently in use in the organisation and industry, including:
 - transmission control protocol
 - internet protocol (TCP/IP)
 - OSI models
- clarify the vendor product range and development directions
- describe how network protocols transcend organisational size and network complexity.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- a live network
- application software and operating system
- appropriate learning and assessment support when required
- networked computers
- organisational guidelines
- technical documentation and installation manuals
- vendor software.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK401 Install and manage a server

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to install and manage a server. Server management includes initial configuration and testing, ongoing administration, software distribution and updates, profiling and monitoring servers, and troubleshooting.

It applies to individuals with competent information and communications technology (ICT) skills, employed in network management or server administration roles.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to install a server	1.1 Prepare for work, according to site specific safety requirements and enterprise workplace health and safety (WHS) processes and procedures 1.2 Obtain server applications and features from appropriate person 1.3 Choose most suitable operating system features and network services with reference to required server solution and technical requirements

ELEMENT	PERFORMANCE CRITERIA
	1.4 Review required installation options 1.5 Analyse data migration requirements 1.6 Back up local data in preparation for installation 1.7 Arrange access to site and advise client of deployment and potential down time
2. Install server as required by the specification	2.1 Create disk partitioning scheme 2.2 Create file systems and virtual memory 2.3 Install network operating system 2.4 Install and configure server applications and network services 2.5 Reconnect and reconfigure connectivity devices 2.6 Patch the operating system and applications to ensure maximum security and reliability 2.7 Restore local data to new server
3. Configure and administer the server	3.1 Configure network directory service 3.2 Create and manage accounts to facilitate security and network access 3.3 Configure user environment using operating system policies and scripts 3.4 Create directory structure and quotas to meet client requirements 3.5 Configure and manage print services 3.6 Set the security, access and sharing of system resources to meet client requirements 3.7 Implement security policy to prevent unauthorised access to the system 3.8 Implement backup and recovery methods to enable restoration capability in the event of a disaster 3.9 Configure update services to provide automatic updates for operating system and applications
4. Monitor and test the server	4.1 Test server for benchmarking against client specification and requirements according to test plan, and record outcomes 4.2 Analyse the error report and make changes as required 4.3 Use troubleshooting tools and techniques to diagnose and correct server problems

ELEMENT	PERFORMANCE CRITERIA
	4.4 Test required changes or additions 4.5 Validate changes or additions against specifications
5. Complete documentation and clean up worksite	5.1 Make and document server configuration and operational changes 5.2 Complete client report and notification of server status 5.3 Clean up and restore worksite to client's satisfaction 5.4 Secure sign-off from appropriate person

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 3.3, 4.2	Recognises and interprets technical documentation to determine job requirements
Writing	4.1, 4.2, 5.1, 5.2	Uses clear, specific and industry related terminology to produce and update workplace documentation
Oral Communication	1.2, 1.7	- Articulates information clearly using specific and relevant language suitable to audience to convey information - Uses listening and questioning techniques to confirm understanding
Numeracy	1.5, 4.2	Uses mathematical formulae to take test measurements, interpret results and evaluate performance and interoperability of the network
Navigate the world of work	1.1, 5.3	- Takes personal responsibility for adherence to legal/regulatory responsibilities relevant to own work context - Understands nature and purpose of own role and associated responsibilities, and how it contributes to the work of others in the immediate work context
Interact with others	5.4	Selects the appropriate form, channel and mode of communication for a specific purpose relevant to own role

Get the work done	1.3, 1.4, 1.6, 1.7, 2.1-2.7, 3.1-3.9, 4.1, 4.3, 4.4, 4.5, 5.1	• Determines job priorities, resources and equipment, and works logically and systematically to undertake clearly defined and familiar tasks • Implements actions according to a predetermined plan, making slight adjustments if necessary • Takes responsibility for routine decision making by selecting from a range of predetermined options in routine situations, identifying and taking some situational factors into account • Initiates standard procedures when adapting configuration procedures, depending on differing operational contingencies, risk situations and environments • Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks, adapting some functions to improve personal efficiency

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK401 Install and manage a server	ICANWK401A Install and manage a server	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK401 Install and manage a server

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- install and configure server
- configure network connectivity
- manage the server operating system, including user accounts, file, network directory and print services
- perform backup and recovery
- update operating system and software
- monitor and test server
- troubleshoot server and network failures.

Candidates should demonstrate competency in at least TWO different network operating systems.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify and describe current network hardware and software systems and their requirements, including:
 - network operating systems (NOS)
 - server applications including compatibility issues and resolution procedures
 - desktop applications and operating systems
- recognise and describe basic server installation and maintenance processes and procedures, including:
 - documentation skills for networks
 - error logging and reporting
 - high availability options for file systems, including redundant array of independent disks (RAID) and replication

- network directory services and network service configuration
- options for performance tuning
- user authentication
- specify and describe processes and procedures required to support and manage a server, including:
 - best practice for implementing backup and recovery procedures
 - boot process
 - operating system help and support utilities
 - operating system installation methods, including installation from CD or DVD, universal serial bus (USB) boot disk, network and script (automated install)
 - printer management
 - process and task management, including process termination
 - task scheduling utilities
 - troubleshooting tools and techniques, including network diagnostic utilities
 - user account and password management.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- a site where server installation may be conducted
- relevant server specifications including:
 - cabling
 - local area networked (LAN) computers
 - server diagnostic software
 - switch
 - client requirements
- wide area network (WAN) service point of presence
- workstations
- relevant regulatory documentation that affects installation activities.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK402 Install and configure virtual machines for sustainable ICT

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to develop and implement virtualisation technologies with the goal of providing a more sustainable information and communications technology (ICT) environment.

It applies to individuals who work in the network area of organisations and are responsible for the use of virtual machines to increase sustainability.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify virtualisation benefits and features	1.1 Research and determine government and industry guidelines and policies for use of desktop and server virtualisation 1.2 Identify benefits of virtualisation of desktop and server environments 1.3 Identify available features of current virtualisation software 1.4 Select virtualisation solution based on current and future

ELEMENT	PERFORMANCE CRITERIA
	needs of the client
2. Install and configure virtualisation software	2.1 Identify, clarify and organise requirements of the client relating to virtualisation technologies, following organisational requirements 2.2 Identify hardware, software and infrastructure components required to be installed and configured to meet technical requirements 2.3 Install and configure software to provide support for virtualisation of desktop and server operating systems 2.4 Configure virtualisation software application features to accommodate required functionality, relating to client and business needs
3. Install and configure virtual machines	3.1 Install virtual machine consistent with client, commercial and business requirements 3.2 Configure virtual machine consistent with client, commercial and business requirements 3.3 Test functionality of installed virtual machine
4. Configure virtual networks of virtual machines	4.1 Configure internet protocol (IP) addressing to match chosen network configuration 4.2 Configure virtual network as host only configuration 4.3 Configure virtual network as bridged configuration 4.4 Configure virtual network as network address translation (NAT) configuration 4.5 Configure services to operate under current network configuration 4.6 Test functionality of virtual network configuration
5. Back up and restore virtual machines	5.1 Back up virtual machine state on shutdown 5.2 Restore state on start-up of virtual machine 5.3 Back up virtual hard drive and software configuration files 5.4 Restore virtual hard drive and software configuration files

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 2.1, 3.1, 3.2	Recognises and interprets industry and government guidelines and organisational policy to determine job requirements
Oral Communication	1.4, 2.1	Elicits information and client business needs by using listening and questioning techniques
Navigate the world of work	2.1	Complies with explicit organisational policies and procedures
Get the work done	1.2-1.4, 2.1, 2.3, 2.4, 3.1-3.3, 4.1-4.6, 5.1-5.4	- Determines job priorities, resources and equipment, and works logically and systematically to undertake clearly defined and familiar tasks - Takes responsibility for routine decision making by selecting from a range of predetermined options in routine situations, identifying and taking some situational factors into account - Initiates standard procedures when adapting configuration procedures, depending on differing operational contingencies, risk situations and environments - Understands key principles and concepts underpinning the design and operation of digital systems and tools, and applies these when troubleshooting existing technology and when seeking to understand the potential impact of new technology - In familiar contexts, responds promptly and intuitively to problems involving virtualised machine environments requiring immediate attention

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK402 Install and	ICANWK402A Install and	Updated to meet	Equivalent

Code and title current version	Code and title previous version	Comments	Equivalence status
configure virtual machines for sustainable ICT	configure virtual machines for sustainable ICT	Standards for Training Packages	unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK402 Install and configure virtual machines for sustainable ICT

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- apply sustainability practices related to current information and communications technology (ICT) network design
- research, identify and develop a virtual machine environment
- implement and maintain a virtual machine environment.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise the current government and industry policies and guidelines related to developing sustainable ICT environments
- identify and describe current technologies and processes designed to produce a sustainable ICT environment
- state the available tools and software applications required to manage virtual machines
- define the structure, function and business organisation of client
- outline the configuration of software applications required to manage virtual machines
- describe the configuration requirements required to integrate virtual machines into an existing network design.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- a site or prototype where virtual machine environments may be implemented

- network technical requirements
- software tools to support implementation of virtual machines.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK403 Manage network and data integrity

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to lead the development of asset protection processes, determining threats and implementing controls to mitigate risk.

It applies to individuals working as middle managers including information security managers, network engineers and network technicians who are responsible for implementing and managing the organisational disaster recovery and asset protection policy and procedures.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Ensure compliance with company network and security policies	1.1 Review company security policies 1.2 Audit and record security access 1.3 Ensure user accounts are controlled 1.4 Ensure secure file and resource access
2. Conduct audit on system assets	2.1 Use appropriate tools and techniques to conduct audit on system hardware and software assets

ELEMENT	PERFORMANCE CRITERIA
	2.2 Develop a system to record assets 2.3 Use system to develop reports on assets for management
3. Implement an antivirus solution	3.1 Research appropriate antivirus and anti-malware solutions 3.2 Implement antivirus or anti-malware solution 3.3 Test antivirus and anti-malware solution functionality
4. Implement systems to protect assets from threats	4.1 Determine environmental threats to data 4.2 Document systems to protect from environmental threat 4.3 Implement system to protect data from environmental threat
5. Develop a backup solution	5.1 Determine appropriate backup type to meet systems needs 5.2 Investigate current backup media options 5.3 Implement a backup solution 5.4 Demonstrate functionality of backup solution 5.5 Demonstrate restore of data from backup media 5.6 Implement a real time backup and data sync solution
6. Monitor network performance	6.1 Determine available network performance monitoring tools 6.2 Implement network performance monitoring tools to monitor network 6.3 Produce report on network performance

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1	Interprets textual information from relevant sources to identify software solutions and adherence to company security policies
Writing	1.2, 2.2, 2.3, 4.2, 6.3	Develops material for a specific audience, using clear and detailed language in order to convey explicit information, requirements and recommendations

Navigate the world of work	1.1	Complies with explicit organisational policies and procedures
Get the work done	1.2, 1.3, 2.1-2.3, 3.2, 3.3, 4.1, 4.3, 5.1-5.6, 6.1, 6.2	- Determines job priorities, resources and equipment, and works logically and systematically to undertake clearly defined and familiar tasks - Takes responsibility for routine decision making by selecting from a range of predetermined options in routine situations, identifying and taking some situational factors into account - Initiates standard procedures when applying solutions in networks, including systems management processes, and deploys rapid solutions to problems involving management of network assets - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Understands the importance of secure information and privacy, and takes personal responsibility for identifying and managing risk factors

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Security policies must include:	- data security - physical security - remote access - user logon.
Tools must include:	- hardware and software audit tools, including: - MSINFO32 - DXdiag - Microsoft Software Inventory Analyzer (MSIA) - E-Z Audit - hardware and software logs.
Backup type must include:	- copy - differential - folder and drive synchronisation

	• full and normal incremental • redundant array of independent disks (RAID).

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK403 Manage network and data integrity	ICANWK403A Manage network and data integrity	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK403 Manage network and data integrity

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify user access control issues
- use appropriate tools to conduct audit on system assets
- implement and test antivirus solution
- employ systems to negate environmental threats
- demonstrate features of data backup, restore and system roll back
- perform network monitoring using a variety of current standard tools
- add network controls according to network and data integrity policies.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise the broad principles of data integrity on a network, including:
 - auditing and control of user access
 - asset tracking and auditing
 - current antivirus solutions and techniques
- describe backup, restore and rollback procedures
- identify and describe system and network monitoring tools and their related functions
- recognise and overview the client organisation structure and business functionality as they relate to data integrity
- select and describe the tools and applications required to manage network and data integrity, including the disaster recovery processes.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- a site or prototype where network and data integrity strategies may be implemented and managed
- use of network support tools currently used in industry
- the organisation's security policies, manufacturer recommendations and network and data integrity protection standards.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK404 Install, operate and troubleshoot a small enterprise branch network

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to utilise networking fundamentals, including wide area network (WAN) technologies, basic security, routing and switching fundamentals, and to configure simple networks.

It applies to individuals working in a network support position. They would use the appropriate tools, equipment, software and protocols to install, operate, and troubleshoot, a small enterprise branch network.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Specify the operation of a data network	1.1 Identify the various network elements 1.2 Use the open system interconnections (OSI) and transmission control protocol, or internet protocol (TCP/IP), models to explain how data flows in a network 1.3 Define the purpose, and basic operation, of the protocols in

ELEMENT	PERFORMANCE CRITERIA
	the OSI and TCP/IP models 1.4 Identify common network problems at layers 1, 2, 3 and 7, using a layered model approach
2. Implement a small switched network	2.1 Select the appropriate media, cables, ports, and connectors to connect switches to other network devices and hosts 2.2 Identify the network segmentation, basic traffic management and switching requirements 2.3 Perform, save and verify the initial switch configuration tasks 2.4 Verify the network status and switch the operation using basic utilities 2.5 Implement and verify the basic security for a switch
3. Implement an IP addressing scheme and IP services to meet network requirements	3.1 Specify the need and role of addressing in a network 3.2 Create and apply an addressing scheme to a network 3.3 Assign and verify valid IP addresses to hosts, servers and networking devices in a local area network (LAN) environment 3.4 Specify the operational requirements of private and public IP addressing 3.5 Implement static and dynamic addressing services for hosts in a LAN environment 3.6 Enable the network address translation (NAT) for a small network, with a single internet service provider (ISP) and connection, and verify the operation 3.7 Configure the dynamic host configuration protocol (DHCP) on a router
4. Implement a small routed network	4.1 Select the appropriate media, cables, ports, and connectors to connect routers to other network devices and hosts 4.2 Research and select a basic router 4.3 Perform, save and verify basic router configuration tasks 4.4 Configure and verify, a classless routing protocol 4.5 Verify the device configuration and network connectivity, using basic utilities 4.6 Implement the password, and physical security
5. Implement and verify WAN links	5.1 Research different methods for connecting to a WAN 5.2 Configure and verify, the basic WAN serial connection

ELEMENT	PERFORMANCE CRITERIA
6. Troubleshoot a small enterprise branch network	6.1 Identify and resolve, common switched network issues 6.2 Identify and correct, IP addressing issues 6.3 Troubleshoot DHCP and NAT on a router 6.4 Identify and resolve, common routing problems 6.5 Troubleshoot basic WAN connection problems

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.4, 2.1, 2.2, 4.1, 4.2, 4.6, 5.1	- Interprets and critically analyses complex texts - Applies appropriate strategies to construct meaning from complex texts
Writing	3.1, 3.4, 4.4	- Communicates complex relationships between ideas and information, matching the style of writing to the purpose and audience - Writes and edits computer code, and technical data, ensuring the correct syntax and accuracy
Oral Communication	1.1, 1.2, 1.3, 2.2, 3.1, 3.4, 4.2, 5.1	- Articulates clearly using specific and relevant language suitable to the audience, to convey information - Uses listening and questioning techniques to confirm the understanding of clients
Get the work done	1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 5.1, 5.2, 6.1, 6.2, 6.3, 6.4, 6.5	- Determines job priorities, resources and equipment and works logically and systematically, to undertake clearly defined and familiar tasks - Understands the purposes, specific functions, and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Recognises and responds to

		predictable routine problems, related to own role in the immediate work context, including debugging, switch and router network issues

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK404 Install, operate and troubleshoot a small enterprise branch network	ICANWK404A Install, operate and troubleshoot a small enterprise branch network	Updated to meet Standards for Training Packages. Minor changes to Performance Criteria for clarity.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK404 Install, operate and troubleshoot a small enterprise branch network

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- specify the network elements
- implement a small switched network
- select and implement the suitable network addressing protocols
- select and install a router
- identify and verify, wide area network (WAN) links
- test and resolve the problems for a small enterprise branch network.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise the design of an internet protocol (IP) addressing scheme
- describe how to install, configure and test the network elements, in order to ensure interoperability within the network
- explain how to apply network topologies, protocols and security solutions and troubleshoot defined network problems.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- a site where the network installation may be conducted
- small enterprise routers and switches

- the network's design documentation
- the equipment specifications
- hardware and software
- the organisational guidelines
- computers.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK405 Build a small wireless local area network

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to build and arrange connectivity to a single zone wireless local area network (WLAN).

It applies to individuals with competent information and communications technology (ICT) skills using one wireless access point or wireless router in a small-to-medium enterprise.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm client and equipment requirements	1.1 Identify, clarify and organise client requirements according to network needs and organisational requirements 1.2 Ensure an appropriate person has given the authority for wireless network access 1.3 Evaluate requirements along with business needs, and translate into technical requirements 1.4 Identify components to be installed in order to meet the technical requirements

ELEMENT	PERFORMANCE CRITERIA
	1.5 Select position for access point, based on user requirements and environmental conditions 1.6 Arrange for preliminary work to be carried out to meet cabling and power requirements
2. Select, install and configure wireless access point	2.1 Select access point device based on current and future client needs 2.2 Install and configure access point to provide wireless access to network 2.3 Configure services 2.4 Test access point and verify wireless connection and security arrangements 2.5 Select, install and configure appropriate wireless card where necessary for legacy equipment
3. Configure network	3.1 Configure security and other key parameters consistent with commercial and business requirements 3.2 Test security and firewall arrangements with appropriate test equipment 3.3 Test the network with user equipment for general compatibility and access
4. Train users	4.1 Determine devices to be connected to the network 4.2 Demonstrate how pairing and log-on arrangements are established to user 4.3 Inform users of wireless network etiquette and traffic capacity issues 4.4 Develop user documentation
5. Monitor and administer wireless network	5.1 Monitor wireless network performance using diagnostic tools 5.2 Debug networking issues to maintain trouble-free wireless connection 5.3 Document current settings and store securely

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.5	Recognises and interprets textual information to determine business requirements and all environmental requisites
Writing	4.4, 5.3	Develops material for a specific audience, using clear and detailed language in order to convey explicit information, and keeps a record of relevant setting information
Oral Communication	1.1, 1.2, 4.2, 4.3	- Uses listening and questioning skills to clarify job requirements - Uses appropriate, detailed and clear language to address key personnel and to disseminate information
Navigate the world of work	1.1	Complies with explicit organisational policies and procedures
Get the work done	1.1, 1.3-1.6, 2.1-2.5, 3.1-3.3, 4.1, 5.1-5.3	- Determines job priorities, resources and equipment, and works logically and systematically to undertake clearly defined and familiar tasks - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Recognises and responds to predictable routine problems related to role in the immediate work context, including connectivity and security issues

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK405 Build a small wireless local area network	ICANWK405A Build a small wireless local area network	Updated to meet Standards for Training Packages Reinstated element 5 to performance criteria	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK405 Build a small wireless local area network

Modification History

Release	Comments
Release 2	Reinstatement of element 'Monitor and administer wireless network' to Elements and Performance Criteria. This version released in ICT Information and Technology Training Package version 3.1
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop, implement and maintain wireless networks
- install, configure and test wireless access points
- test security and network to business specifications
- develop user training material
- monitor and resolve wireless network issues.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline features of security threats
- summarise the basic principles of network security, including:
 - audit and intrusion detection systems
 - auditing and penetration testing techniques
 - authentication methods
 - network protocols and operating systems
 - security protocols, standards and data encryption
- describe the factors that impact on a small wireless network, including:
 - bandwidth and quality of service

- factors affecting signal quality
- layer 2 and layer 3 design issues
- features of a small office or home office (SOHO) network
- wireless security strategies
- wireless topologies
- wireless local area network (WLAN) solutions
- outline the protocols and their application for wireless networks, including:
 - transmission control protocol (TCP)
 - internet protocol (IP).

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- network technical requirements
- network infrastructure, including wireless hardware and software.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK406 Install, configure and test network security

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to install, configure and test network security in an information and communications technology (ICT) network.

It applies to individuals working as ICT professionals who install, configure and test secure networks of any size.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Assess network security threats and vulnerabilities to identify risk	1.1 Assess and report on current system security, according to required asset security level 1.2 Determine additional network, software, hardware and system security threats and vulnerabilities 1.3 Use identified threats and vulnerability information to identify security risks 1.4 Make recommendations to management to address security deficiencies, according to current and future commercial and

ELEMENT	PERFORMANCE CRITERIA
	business requirements
2. Implement countermeasures for identified vulnerabilities and threats	2.1 Implement required level of perimeter security based on current and future business needs 2.2 Assess and implement best practice server and network hardening techniques and measures 2.3 Implement secure authentication and user account controls 2.4 Secure data integrity and transmission
3. Test and verify functionality and performance of security system implemented	3.1 Design test items to verify key function and performance measures against criteria 3.2 Conduct function and performance tests recording results 3.3 Modify and debug security system as necessary 3.4 Develop documentation on current system settings and file for future reference
4. Provide systems for monitoring and maintaining security	4.1 Monitor current network security, including physical aspects, using appropriate third party testing software where applicable 4.2 Review logs and audit reports to identify and record security incidents, intrusions or attempts 4.3 Carry out spot checks and audits to ensure that procedures are not being bypassed 4.4 Document newly discovered security threats, vulnerabilities and risks in a report for presentation to appropriate person to gain approval for changes to be made

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	4.2	Recognises and interprets textual information to determine specific information about security incidents
Writing	1.1, 1.4, 3.2, 3.4,	Accurately records test results and develops material for a specific audience, using clear and

	4.4	detailed language in order to convey explicit information
Oral Communication	1.1, 1.4, 4.4	• Articulates information clearly, using specific and relevant language suitable to audience to convey recommendations and provide verbal reports • Uses listening and questioning techniques to confirm understanding
Numeracy	1.4	• Extracts and evaluates the mathematical information embedded in a range of tasks and texts
Get the work done	1.1-1.4, 2.1, 2.3, 2.4, 3.1-3.3, 4.1, 4.3	• Determines job priorities, resources and equipment, and works logically and systematically to undertake clearly defined and familiar tasks • Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks • Recognises and responds to predictable routine problems related to own role in the immediate work context, including detecting intrusion and debugging the system when required • Automatically implements standard procedures for routine decisions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK406 Install, configure and test network security	ICANWK406A Install, configure and test network security	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK406 Install, configure and test network security

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- assess and identify security threats, vulnerabilities and risks
- determine appropriate countermeasure for threat, vulnerability or risk
- implement countermeasure per threat or risk
- install, configure and test network elements to ensure perimeter security
- test and verify function and performance of selected security measures
- monitor network for suspicious activity and take appropriate action where necessary
- document newly discovered threats, vulnerabilities and risks, including change recommendations for approval.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline authentication issues
- summarise the security requirements of the client business domain, including:
 - organisation structure and business functionality
 - features and capabilities of networking technologies
 - privacy issues and privacy legislation
 - security information sources
 - risk analysis
- outline common virtual private network (VPN) issues, including bandwidth and dynamic security environment
- explain how to configure routers and switches

- summarise current industry accepted hardware and software security products, including general features and capabilities
- outline the function and operation of VPN concepts, including encryption, firewalls, packet tunnelling and authentication
- outline network protocols and operating systems
- summarise organisational issues surrounding security
- outline security perimeters and their functions
- describe security protocols, standards and data encryption
- summarise security threats, including eavesdropping, data interception, data corruption and data falsification
- outline types of VPNs, including site-to-site and user-to-site internet traffic and extranets
- summarise the systems and procedures related to:
 - audit and intrusion detection systems
 - auditing and penetration testing techniques
 - cryptography
 - local area network (LAN), wireless local area network (WLAN) and wide area network (WAN)
 - screened subnets
 - transmission control protocols or internet protocols (TCPs/IPs) and applications
 - use of virus detection software.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- a site where secure network installation may be conducted
- network security documentation
- equipment specifications
- network components
- hardware and software
- firewalls (hardware and software)
- a live network
- organisational guidelines
- networked (LAN) computers
- WAN service point of presence.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK407 Install and configure client-server applications and services

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to install, configure, maintain and support server-side applications as well as client applications on network workstations, in both Windows based and Linux based networks.

It applies to individuals working as network administrators and network support staff who implement the installation and configuration of client-server based software.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine client -server software requirements	1.1 Select a client-server solution that best fits the desired outcome for a given scenario 1.2 Select hardware required to implement the client-server solution for the desired outcome 1.3 Select an appropriate host operating system for the client's server software

ELEMENT	PERFORMANCE CRITERIA
2. Obtain and configure server application software according to industry best practice	2.1 Investigate the range of client-server products available for the desired outcome, including commercial and open source 2.2 Identify hardware requirements 2.3 Identify available operating system platforms to host the client-server software
3. Install, configure, and manage services to meet business requirements	3.1 Install client-server software to both server and client hardware according to business guidelines 3.2 Configure the client-server software according to vendor guidelines 3.3 Monitor client-server performance to ensure performance, according to business requirements 3.4 Manage the installation of upgrades and patches to the client-server software environment 3.5 Backup and maintain client-server software
4. Assess configuration effect on overall network design	4.1 Identify appropriate utilities to monitor and determine network performance 4.2 Create network performance benchmarks prior to and on completion of client-server software installation 4.3 Compare benchmarks to assess performance effect on network after installation of client-server software
5. Test and sign off	5.1 Test operation of the client-server software to ensure client requirements are met 5.2 Obtain sign-off from appropriate person

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.1, 3.2	Recognises and interprets technical and vendor-specific information to determine business requirements
Writing	4.2	Develops material for a specific audience, using clear and detailed language in order to convey explicit

		information
Numeracy	4.2, 4.3	Interprets numerical information to analyse memory, hard disk and performance requirements
Navigate the world of work	3.1, 3.2	Recognises and follows explicit and implicit protocols, and meets expectations associated with own role
Interact with others	5.2	Selects the appropriate form, channel and mode of communication for a specific purpose relevant to own role
Get the work done	1.1-1.3, 2.1-2.3, 3.1-3.5, 4.1, 5.1	- Uses logical planning processes and an increasingly intuitive understanding of context to identify relevant information to plan business operating system requirements - Reflects on the ways in which digital systems and tools are used, or could be used, to achieve work goals, and begins to recognise strategic and operational applications - Uses familiar digital systems and tools to access, organise, analyse and display relevant information - Troubleshoots configuration and operational requirements by recognising and anticipating an increasing range of familiar problems, their symptoms and causes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK407 Install and configure client-server applications and services	ICANWK407A Install and configure client-server applications and services	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK407 Install and configure client-server applications and services

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- install and configure server based client-server software
- install and configure client software to communicate with appropriate server software
- test operation of client-server software
- identify and implement required updates for client-server software
- monitor performance of client-server software
- backup and maintain client-server software.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise the requirements for client-server applications and services, including:
 - computer hardware and software required
 - internet protocol (IP) addressing
 - networking fundamentals
 - operating systems
- identify and describe the operating system help and support utilities required, including:
 - procedures for implementing backup and recovery
 - software installation and configuration
 - user account and password management
 - troubleshooting tools and techniques
 - network diagnostic utilities.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- a client-server based network
- appropriate client-server software.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK408 Configure a desktop environment

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to install, configure and support a desktop or workstation operating system in a networked environment.

It applies to individuals with competent technical skills employed in information and communications technology (ICT) support roles.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to install a desktop operating system	1.1 Prepare for work according to site specific safety requirements and enterprise work health and safety (WHS) processes and procedures 1.2 Obtain desktop applications and features from appropriate person 1.3 Review required installation options and file systems 1.4 Determine and apply knowledge of licensing, hardware and system requirements

ELEMENT	PERFORMANCE CRITERIA
	1.5 Analyse data migration requirements 1.6 Backup local data in preparation for installation 1.7 Arrange access to site and advise client of deployment and potential down times
2. Install desktop operating system	2.1 Install or upgrade desktop operating system using appropriate installation or update method 2.2 Install desktop applications according to identified requirements 2.3 Configure network settings to connect workstation to network 2.4 Patch the operating system and applications to ensure maximum security and reliability 2.5 Restore local data to new workstation
3. Configure desktop environment	3.1 Configure hardware devices 3.2 Administer user environment 3.3 Create file and directory structure using appropriate administration and system tools 3.4 Configure access to external data 3.5 Configure desktop applications according to business requirements
4. Operate command line interface	4.1 Open a command line interface 4.2 Run commands and scripts from the command line interface 4.3 Manipulate files using the command line
5. Configure desktop security	5.1 Modify default user settings to ensure that they match organisational security policies 5.2 Modify file and directory ownership and permissions to ensure data security requirements are met 5.3 Ensure password security 5.4 Check appropriate legal notices are displayed at logon 5.5 Implement security options for network protocols 5.6 Configure security settings for desktop applications according to business requirements
6. Monitor and test the desktop	6.1 Test desktop environment to ensure that client, functionality and performance requirements have been met

ELEMENT	PERFORMANCE CRITERIA
	6.2 Analyse and respond to diagnostic information 6.3 Use troubleshooting tools and techniques to diagnose and correct desktop problems 6.4 Document the desktop environment, according to organisational policy

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.4, 3.5, 5.1, 5.4, 5.6, 6.4	Recognises and interprets technical material, organisational policy and regulatory information to determine job requirements
Writing	6.4	Prepares written reports and workplace documentation that communicate information clearly and effectively
Oral Communication	1.2, 1.7	- Articulates clearly using specific and relevant language suitable to audience to convey important information - Uses listening and questioning techniques to confirm understanding
Numeracy	1.5, 6.2	Analyses numerical test measurements to evaluate workstation performance
Navigate the world of work	1.1	Appreciates the implications of legal and regulatory responsibilities related to own work
Get the work done	1.1, 1.3-1.6, 2.1- 2.5, 3.1-3.5, 4.1-4.3, 5.1-5.3, 5.5, 5.6, 6.1-6.3	- Uses logical planning processes and an increasingly intuitive understanding of context to identify relevant information to plan business operating system requirements - Reflects on the ways in which digital systems and tools are used, or could be used, to achieve work goals, and begins to recognise strategic and operational applications - Uses familiar digital systems and tools to access, organise, analyse and display relevant information

		Recognises and takes responsibility for addressing predictable and some less predictable problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK408 Configure a desktop environment	ICANWK408A Configure a desktop environment	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK408 Configure a desktop environment

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- install and configure a desktop operating system
- attach the desktop to the network
- configure the desktop operating system, including user accounts, file and print services, and security
- perform backup and recovery
- update operating system and software
- monitor and troubleshoot the desktop environment.

Candidates should demonstrate competency in at least TWO different desktop operating systems.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the features of current desktop operating systems, applications, compatibility issues and the resolution procedures
- summarise the configuration requirements of a desktop environment, including:
 - command line interface and scripts
 - controlling the boot process
 - error logging and reporting
 - file naming conventions related to selected operating system
 - network protocols and transmission control protocol or internet protocol (TCP/IP) network connectivity
 - operating systems and their functions, including file system, memory management and process scheduling
 - printer driver and queue management

- process or task management, including process termination
- tools available for remote assistance and administration
- troubleshooting tools and techniques, including network diagnostic utilities
- user account, group and password administration and guidelines for selecting a secure password
- explain file system navigation and manipulation utilities, including:
 - edit, copy, move and search
 - operating system help and support utilities
- summarise relevant work health and safety (WHS) and regulatory requirements for desktop operators.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- a site where server installation may be conducted
- relevant server specifications, including:
 - cabling
 - local area network (LAN)
 - diagnostic software
 - switch
 - client requirements
 - wide area network (WAN) service point of presence
 - desktop workstations
- relevant regulatory documentation that affects installation activities.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK409 Create scripts for networking

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake scripted programming tasks for networking related activities.

It applies to individuals with competent technical skills employed in network or systems administration roles.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Develop algorithms to represent solutions to a given problem	1.1 Consult with client and key stakeholders to identify the problem and associated script requirements 1.2 Employ abbreviated software development cycle to script creation 1.3 Develop an algorithm to solve the problem and meet client requirements 1.4 Develop an algorithm which takes account of expected possible situations

ELEMENT	PERFORMANCE CRITERIA
	1.5 Develop an algorithm which is guaranteed to end 1.6 Use structure, sequence, selection and iteration
2. Create code	2.1 Select appropriate scripting language 2.2 Demonstrate understanding and application of basic language syntax rules and best practices 2.3 Select and use language data types, operators and expressions to create clear and concise code 2.4 Use techniques of selection, iteration and sequence to control script execution flow 2.5 Use techniques for sequential file input and output to retrieve and store information 2.6 Obtain and use user input to affect the operation of the script 2.7 Apply internal document principles to created code 2.8 Follow organisational guidelines for developing maintainable code when creating scripts 2.9 Adhere to coding standards when creating scripts
3. Use operating system tools	3.1 Use searching and sorting tools to select information from the logging output of operating system (OS) 3.2 Implement controls to ensure that where significant events occur, script creates and maintains a log of operations via operating system logging mechanism 3.3 Register and run scripts with OS scheduling facility
4. Test and debug code	4.1 Engineer, document and conduct simple tests to confirm code meets design specification 4.2 Identify areas that are not covered or are covered incorrectly in the script 4.3 Take action to ensure that code complies with security policy 4.4 Take action to ensure that code operates with proper permissions 4.5 Use script debugging techniques suitable for use with scripting language to detect and resolve errors of syntactical, logical and design origin
5. Document script	5.1 Create technical-level documentation

ELEMENT	PERFORMANCE CRITERIA
	5.2 Create user-level documentation

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.8, 2.9, 4.3	Recognises and interprets technical material, organisational policy and regulatory information to determine job requirements
Writing	2.7, 3.2, 4.1, 5.1, 5.2	Prepares user, peer and technical documentation that communicates complex information clearly and effectively
Oral Communication	1.1, 2.6	Uses listening and questioning skills to confirm understanding for requirements, participates in a verbal exchange of ideas/solutions and uses appropriate, detailed and clear language to address key personnel and to disseminate information
Navigate the world of work	2.8, 2.9, 4.3	Recognises and follows explicit protocols and meets expectations associated with own role
Numeracy	1.3-1.5, 2.3	Creates complex algorithms to calculate and process data for code creation
Get the work done	1.2, 2.1-2.5, 2.8, 3.1-3.3, 4.1, 4.2, 4.4, 4.5	- Uses logical planning processes and an increasingly intuitive understanding of context to identify relevant information to plan business requirements - Reflects on the ways in which digital systems and tools are used, or could be used, to achieve work goals and begins to recognise strategic and operational applications - Understands the key principles and concepts underpinning the design and operation of digital systems and tools, and applies these when troubleshooting existing technology - Seeks advice and feedback from client when making decisions - Applies formal problem solving processes when tackling an unfamiliar problem, breaking complex

		issues into manageable parts and identifying and evaluating options

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK409 Create scripts for networking	ICANWK409A Create scripts for networking	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK409 Create scripts for networking

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop an algorithmic statement of a solution for a set process
- design, document, construct and test a small single purpose operating system (OS) utility application in response to a problem description
- create scripted programs that access information stored in files on the system and use system utility programs to sort or find information within these files
- validate and record script results.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise the principles of algorithm design
- identify and describe operating system components and processes, including:
 - command line interface
 - log files
 - program scheduling utilities
 - development methodologies
 - tools and utilities
 - testing methods
- explain debugging for a variety of scripting scenarios
- outline programming structured control constructs: sequence, selection and iteration
- summarise scripting techniques and language syntax.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- technical requirements
- software development environment
- software testing environment.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK410 Install hardware to a network

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to plan, manage and install new hardware components in a network.

It applies to individuals employed in technical information and communications technology (ICT) support roles, such as network administrators, who support network hardware in a peer-to-peer or client-server networked environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine network hardware requirements	1.1 Assess client network hardware and cabling requirements, considering compatibility with existing application software and operating system 1.2 Analyse requirements against local area network (LAN), wide area network (WAN), wireless networks, and mobile equipment access design limitations and organisational guidelines 1.3 Evaluate client requirements according to organisational guidelines, corporate purchasing procedures, licensing

ELEMENT	PERFORMANCE CRITERIA
	arrangements and budget
2. Obtain network hardware	2.1 Contact vendors and obtain technical specifications 2.2 Evaluate or test hardware according to client requirements and organisational guidelines 2.3 Document recommendations and provide copies to appropriate person 2.4 Determine and document licensing requirements and security issues 2.5 Acquire hardware according to recommendations and organisational procedures 2.6 Organise cabling infrastructure where required
3. Install network hardware	3.1 Conduct installation with minimal disruption to clients 3.2 Install hardware according to appropriate installation procedures 3.3 Configure and test the installation to ensure that it meets client needs
4. Provide instruction and support for installed products	4.1 Determine and document client instructions and needs 4.2 Provide one-to-one or group instruction to client and users as required 4.3 Obtain client evaluation and feedback to ensure that client requirements have been met

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 2.2, 2.5	Recognises and interprets licensing and security issues, technical information and organisational procedures to determine job requirements
Writing	2.4, 4.1	Prepares information which incorporates evaluation of information and specialised and cohesive language in a format and style appropriate to a specific audience

Oral Communication	2.1, 2.3, 4.1-4.3	• Uses listening and questioning skills to confirm understanding for requirements • Participates in regular verbal exchanges and uses appropriate, detailed and clear language to address key personnel and to disseminate information
Numeracy	1.3	• Uses mathematical formulas and calculations to estimate and plan costs according to business budgets
Navigate the world of work	1.2, 1.3, 2.4, 2.5	• Appreciates the implications of legal and regulatory responsibilities related to own work
Get the work done	1.1-1.3, 2.2, 2.5, 2.6, 3.1- 3.3	• Determines job priorities, resources and equipment, and works logically and systematically to maintain the continuity of network operations and business functions during network installation tasks • Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks • Recognises and responds to predictable routine problems related to own role in the immediate work context • Automatically implements standard procedures for routine decisions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK410 Install hardware to a network	ICANWK410A Install hardware to a network	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK410 Install hardware to a network

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- evaluate client user requirements and hardware installation
- install a range of network hardware by planning, managing and supporting the installation of new components in a network, according to organisational policies and procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise current industry, data and voice networking, security products, devices and procedures, including:
 - current industry accepted network protocols
 - organisational contracting procedures and responsibilities
 - system diagnostic software
- outline current industry accepted network hardware and software products
- explain hardware and software installation procedures
- describe local area network (LAN) capabilities and characteristics, such as network type, internet protocol (IP) addressing, switch or hub operation
- describe various features of network connections, including types of cables, cabling distance limitations and wireless connections
- outline operating systems sufficient to enable basic installation
- summarise set-up and configuration procedures
- describe software packages supported by the organisation.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- vendor hardware and software components
- application software and operating system
- hardware maintenance tools
- a live network
- networked computers
- organisational guidelines
- technical documentation and installation manuals.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK411 Deploy software to networked computers

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to plan, manage and support the installation of new or upgraded software to networked computers according to vendor and organisation specifications.

It applies to individuals involved in installing, configuring, maintaining and supporting software, such as network administrators and network support staff.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine operating system and software and hardware requirements	1.1 Assess client software and licensing requirements, considering compatibility with existing application software and operating system 1.2 Assess hardware requirements 1.3 Analyse requirements against local area network (LAN), wide area network (WAN), and wireless networks within organisational guidelines 1.4 Evaluate client requirements according to organisational

ELEMENT	PERFORMANCE CRITERIA
	guidelines, corporate purchasing procedures and budget
2. Obtain deployment software to automate deployment	2.1 Evaluate deployment software according to client requirements and organisational guidelines 2.2 Contact vendors and obtain technical specifications, including support arrangements and licensing 2.3 Acquire software and licences according to organisational procedures 2.4 Store software licences and manuals according to organisational guidelines
3. Automate installation of operating system via network	3.1 Plan and deploy operating system according to appropriate vendor installation procedures, with minimal disruption to network and clients 3.2 Configure and test installation to ensure that it meets client needs and vendor specifications 3.3 Install updates and patches
4. Automate installation of software packages via network	4.1 Plan and deploy software packages according to appropriate vendor installation procedures, with minimal disruption to network and clients 4.2 Configure and test installation to ensure that it meets client needs and vendor specifications 4.3 Install updates and patches
5. Test and sign off	5.1 Test installed operating system and software for error-free performance, identifying and resolving problems 5.2 Determine and document security and licensing issues 5.3 Obtain client evaluation and feedback to ensure that client requirements have been met

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.4, 2.1, 2.3, 2.4,	Recognises and interprets technical, licensing

	3.1, 3.2, 4.1, 4.2	and organisational information to determine business requirements
Writing	1.3, 5.2	Develops material for a specific audience, using clear and detailed language in order to convey explicit information
Oral Communication	2.2, 5.3	- Uses active listening, observational and questioning techniques in order to identify information and confirm, clarify or revise understanding - Uses specific and relevant language to obtain information to determine job requirements
Numeracy	1.4	Uses mathematical formulas and calculations to estimate and plan costs according to business budgets
Navigate the world of work	1.1, 1.3, 1.4, 2.1-2.4, 5.2	Appreciates the implications of legal and regulatory responsibilities related to own work
Get the work done	1.1-1.4, 2.1, 2.3, 2.4, 3.1-3.3, 4.1-4.3, 5.1	- Determines job priorities, resources and equipment, and works logically and systematically - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Uses analytical processes to respond to deployment and configuration issues in the immediate work context - Automatically implements standard procedures for routine decisions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK411 Deploy software to networked computers	ICANWK411A Deploy software to networked computers	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK411 Deploy software to networked computers

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify client software requirements
- plan and deploy automatic installation of operating system and software
- configure and test installation, ensuring client needs are met.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise network protocols and operating systems, including:
 - transmission control protocols (TCP)
 - internet protocols (IPs)
 - network applications
- describe organisational contracting procedures and responsibilities
- outline software licensing requirements and documentation
- explain current industry standards related to software deployment, including:
 - deployment software configuration
 - configuration of automated deployment processes
 - operating system deployment
 - software package deployment
 - troubleshooting deployment processes.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- a site or prototype where deployment processes may be implemented
- a live network
- software tools to support implementation of deployment processes
- technical documentation and installation manuals
- organisational guidelines.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK412 Create network documentation

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to determine network requirements, and produce and evaluate appropriate network documentation.

It applies to individuals with good task management and competent information and communications technology (ICT) skills, who are working as network administrators, technicians and support personnel.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine network documentation requirements	1.1 Consult with appropriate personnel 1.2 Identify network documentation standards 1.3 Define network configuration 1.4 Develop naming standards and labelling schemes 1.5 Develop network addressing scheme and verify, using calculations

ELEMENT	PERFORMANCE CRITERIA
2. Design network diagrams and checklists	2.1 Identify network software mapping tools 2.2 Use network software mapping tools to design network diagrams 2.3 Develop plans and checklists 2.4 Develop manuals
3. Produce network documentation	3.1 Validate documentation structure with appropriate personnel 3.2 Produce network diagrams 3.3 Produce network plans and checklists 3.4 Produce procedure and policy manuals 3.5 Prepare documentation for publication
4. Complete network documentation	4.1 Check network documentation with appropriate personnel 4.2 Select appropriate media 4.3 Publish network documentation 4.4 Record and store essential network documentation 4.5 Notify appropriate personnel of the completed network documentation

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2	Gathers, interprets and analyses current industry information from a range of sources and identifies relevant and key information
Writing	1.4, 2.3, 2.4, 3.2-3.5, 4.4, 4.5	Prepares workplace documentation which incorporates an evaluation of information and specialised and cohesive language in a format and style appropriate to a specific audience
Oral Communication	1.1, 3.1, 4.1, 4.5	Articulates requirements and strategies clearly and distinctively, using technical language appropriate to audience and environment

Numeracy	1.5	• Recognises, compares and interprets technical data when developing network addressing scheme
Get the work done	1.2, 1.3, 1.5, 2.1, 2.2, 4.2- 4.4	• Takes responsibility for planning and organising own workload, identifying ways of sequencing, prioritising and monitoring own work • Uses familiar digital systems and tools to access, organise, analyse and display information relevant to role • Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks • Makes a range of important decisions in relatively complex situations, taking a range of constraints into account

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK412 Create network documentation	ICANWK412A Create network documentation	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK412 Create network documentation

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- determine client requirements
- design network documentation according to standards
- produce network documentation according to design specifications.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain open systems interconnect (OSI) layered communication model
- summarise network requirements related to:
 - applications
 - life cycles
 - manageability
 - quality of service
- explain network design concepts related to:
 - financial constraints
 - network topologies
 - organisation requirements
 - physical constraints
 - security issues.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- relevant network documentation
- legislation and standards documentation
- industry codes of practice.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK414 Create a common gateway interface script

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to define and produce common gateway interface (CGI) script and install that script on a server.

It applies to individuals working in the network or web development area who are required to use CGI scripting as a common means of interacting with websites, providing security access to directories and databases.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Define specification for CGI script	1.1 Determine the functionality of the CGI form 1.2 Define the functionality of the CGI script 1.3 Choose appropriate language in which to write the CGI script 1.4 Determine server requirements
2. Create CGI form and write script	2.1 Produce a hypertext markup language (HTML) web document that uses the form elements required by the CGI

ELEMENT	PERFORMANCE CRITERIA
	script specification and includes the uniform resource locator (URL) for the CGI script 2.2 Write the CGI script to function as required by the CGI script specification
3. Test CGI script	3.1 Configure the server, if required, that will host the CGI script 3.2 Upload the CGI script to the server 3.3 Run the CGI form and assess its output 3.4 Reiterate until the specification for the CGI script is met

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Writing	1.2, 2.1, 2.2	Prepares workplace documentation that incorporates an evaluation of technical information and specialised and cohesive language in a format and style appropriate to a specific audience
Numeracy	2.1, 3.3, 3.4	Analyses numerical data to determine functionality of script
Get the work done	1.1, 1.3, 1.4, 2.1, 3.1-3.4	- Takes responsibility for planning and organising own workload, identifying ways of sequencing, prioritising and monitoring own work - Uses familiar digital systems and tools to access, organise, analyse and display information relevant to role - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Makes a range of important decisions in relatively complex situations, taking a range of constraints into account - When dealing with complex issues, may use intuition to identify the general problem area, switching to analytical processes to clarify goals

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK414 Create a common gateway interface script	ICANWK414A Create a common gateway interface script	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK414 Create a common gateway interface script

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- review the requirements
- produce common gateway interface (CGI) forms and scripts to meet the requirements
- upload scripts to a server
- test the script and rework until requirements are met.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify and describe a scripting language suitable for CGI
- describe CGI 1.1/1.2 specifications and their functionality
- describe the security issues surrounding CGI
- outline common web servers
- outline the principles behind copyleft and Free Software Foundation
- describe copyright and intellectual property issues relating to programming.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- web servers
- an e-business website
- file transfer protocol (FTP) or file transfer client software

- server access.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK416 Build security into virtual private networks

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to build security into a virtual private network (VPN).

It applies to individuals with competent information and communications technology (ICT) skills and who are working in the network area and are required to ensure that VPNs contain required security.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Configure router to provide for network security monitoring and management	1.1 Create and apply audit rules consistent with policies, standards, protocols and management systems 1.2 Configure router to provide appropriate level of asset security and monitoring of security consistent with commercial and business requirements 1.3 Monitor and manage system to assess the level of security and attempts to breach security of framework components 1.4 Employ appropriate hardware and software to monitor and

ELEMENT	PERFORMANCE CRITERIA
	address security issues and provide VPN solutions
2. Secure a site-to-site VPN	2.1 Configure internet key exchange (IKE) and internet protocol security (IPSec) 2.2 Configure site-to-site IPSec VPN using pre-shared keys 2.3 Configure site-to-site IPSec VPN using digital certificates
3. Secure a remote access VPN	3.1 Configure a VPN server 3.2 Install and administer a router management console 3.3 Develop documentation on current system settings and framework components, and file securely for future reference

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1	Gathers, interprets and analyses current industry rules from a range of sources and identifies relevant and key information
Writing	1.1, 3.3	Prepares workplace documentation that incorporates an evaluation of information and specialised and cohesive language in a format and style appropriate to a specific audience
Navigate the world of work	1.1	Recognises and follows explicit and implicit protocols, and meets expectations associated with own role
Get the work done	1.2-1.4, 2.1-2.3, 3.1-3.3	- Uses a combination of formal, logical planning processes and an increasingly intuitive understanding of context to identify relevant information and risks - Understands the importance of secure information in relation to own work and takes personal responsibility for identifying and managing risk - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Initiates standard procedures when responding to

		familiar problems within the immediate context

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK416 Build security into virtual private networks	ICANWK416A Build security into virtual private networks	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK416 Build security into virtual private networks

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- configure a router to provide the required security
- implement and maintain security functionality for a virtual private network (VPN), including:
 - site to site VPN
 - remote access VPN
- produce security documentation.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the characteristics of a VPN system, including:
 - site to site
 - remote access systems
 - network protocols and operating systems relevant to VPN, including its features, issues and functions
- describe the security requirements for a VPN, including:
 - auditing and penetration testing techniques
 - configuration of routers and switches
 - security protocols, standards and data encryption
 - processes and techniques related to security perimeters and their functions
 - security threats, including eavesdropping, data interception, data corruption and data falsification

- transmission control protocol or internet protocol (TCP/IP) protocols and applications audit and intrusion detection systems
- authentication issues
- recognise and describe the differences between common networks, including:
 - local area network (LAN)
 - wireless local area network (WLAN)
 - wide area networks (WAN)
- identify and describe organisational issues surrounding:
 - security cryptography
 - screened subnets
 - virus detection software.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- network technical requirements
- network infrastructure, including servers and security hardware and software.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK417 Build an enterprise wireless network

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to build an enterprise, community or mesh wireless network within and outside buildings.

It applies to individuals with excellent task management, interpersonal and information and communications technology (ICT) skills working in senior design roles in the networking area, who are required to develop complex wireless networks for organisations.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm client requirements and network equipment required	1.1 Identify and clarify organisational requirements of the client 1.2 Evaluate client requirements along with business needs in order to translate into technical requirements 1.3 Review existing network design documentation to ensure it is authorised, current and complete 1.4 Identify network topology 1.5 Identify the components required to be installed to meet the

ELEMENT	PERFORMANCE CRITERIA
	technical requirements 1.6 Contact vendors and service suppliers to obtain specifications and availability of identified components 1.7 Ensure preliminary work is completed within the required timeframe
2. Prepare for installation	2.1 Ensure client and users are aware of date and time of installation 2.2 Gather, prepare and check installation and safety equipment 2.3 Assess on-site safety arrangements for installers and users
3. Select, install and configure access points and other wireless devices	3.1 Select appropriate hardware based on identified components 3.2 Install and configure hardware to provide wireless access to network 3.3 Ensure connections are secured against intrusion or data access by unauthorised persons, are safe for users, and are protected from the environment 3.4 Configure security, monitoring, logging and quality of service features consistent with standards and protocols 3.5 Ensure test equipment is calibrated 3.6 Test wireless network systems performance and verify that it meets enterprise requirements and is consistent with standards and protocols
4. Select, install and configure antennas	4.1 Select appropriate antennas based on design plan 4.2 Safely install and configure antennas to provide wireless access to network 4.3 Measure and assess signal strength within and outside building 4.4 Resolve and report radio frequency interference issues
5. Select, install and configure antennas	5.1 Identify possible security threats to assets 5.2 Configure client server and helper security devices 5.3 Configure associations and filters
6. Train users	6.1 Provide training for users to establish and manage network connections 6.2 Resolve pairing and log-on difficulties for users 6.3 Inform users of wireless network etiquette and traffic

ELEMENT	PERFORMANCE CRITERIA
	capacity issues 6.4 Advise users of help desk contact details
7. Monitor and administer wireless network	7.1 Monitor wireless network performance using diagnostic tools, including appropriate software 7.2 Debug networking issues to maintain trouble-free wireless connection 7.3 Document current settings and store securely, consistent with commercial and business requirements
8. Finalise build process	8.1 Review network for performance issues, planned maintenance or upgrade requirements 8.2 Report to client with network documentation and recommendations for performance issues 8.3 File documentation according to organisational guidelines

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.3, 1.5, 3.4, 3.6, 4.1, 8.3	Gathers, interprets and analyses information from a range of sources and identifies relevant and key information
Writing	4.4, 7.3	Prepares workplace documentation that incorporates an evaluation of information and specialised language in a format and style appropriate to a specific audience
Oral Communication	1.1, 1.2, 1.6, 2.1, 4.4, 6.1, 6.3, 6.4, 8.2	- Uses active listening and observational and questioning techniques to identify information and confirm, clarify or revise understanding - Articulates requirements and strategies clearly and distinctively, using technical language appropriate to audience and environment
Numeracy	3.5, 4.3	Interprets numerical information to calibrate equipment and measure and assess signal strength

Navigate the world of work	8.3	Complies with explicit organisational policies and procedures
Interact with others	6.1, 6.3, 6.4, 8.2	Recognises and applies the protocols governing what to communicate, with whom and how in a range of different contexts
Get the work done	1.4, 1.5, 1.7, 2.2, 2.3, 3.1-3.6, 4.1, 4.2, 4.4, 5.1-5.3, 6.2, 7.1-7.3, 8.1, 8.3	- Uses a combination of formal, logical planning processes to ensure work is completed according to time constraints and an increasingly intuitive understanding of context to identify relevant information and risks - Understands the importance of secure information in relation to own work and takes personal responsibility for identifying and managing risk - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Initiates standard procedures when solving a broad range of ICT problems - Uses familiar digital systems and tools to access, organise, analyse and store information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK417 Build an enterprise wireless network	ICANWK417A Build an enterprise wireless network	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK417 Build an enterprise wireless network

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- confirm client organisational and business requirements
- determine hardware and software requirements
- prepare for safe installation
- select, install and configure required wireless hardware
- train users
- test, monitor, and administer the installation
- finalise installation and prepare required documents documentation.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- Identify and describe current wireless local area network (WLAN) and wireless area network (WAN) solutions, including:
 - audit and intrusion detection systems
 - auditing and penetration testing techniques
 - bandwidth and quality of service
 - factors affecting signal quality
 - layer 2 and layer 3 design issues
 - suitability for small office home office (SOHO) and enterprise local area networks (LANs)
 - transmission control protocols or internet protocols (TCPs/IPs) and applications
 - wireless topologies

- describe the common features of security threats and how to develop a security strategy, including:
 - security protocols
 - standards
 - data encryption
- identify and describe common network protocols and operating systems.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- technical requirements
- network infrastructure, including wireless hardware and software.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTNWK418 Implement backbone technologies in a local area network

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to implement core layer (backbone) connectivity in a local area network (LAN) for applications between floors in a multi-storey building or between separate buildings.

This unit focuses on configuring high-speed (high-bandwidth) channels between high-end switches.

It applies to individuals who are required to enable backbone connectivity in a LAN.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Define network	1.1 Identify current and future network requirements based on the organisation's business and technical requirements 1.2 Design an appropriate structure to meet client requirements, such as video, audio or data application services

ELEMENT	PERFORMANCE CRITERIA
	1.3 Design a network addressing system with subnet and host identities (IP addressing) and virtual LANs (VLANs) 1.4 Identify and document resource requirements according to network design
2. Install and configure network backbone	2.1 Install and configure switches and routers according to network requirements and resources 2.2 Install network protocol suites using configurations on switch uplink ports as required by network design specifications 2.3 Configure hosts and workstations for network access
3. Test and validate network	3.1 Test network connectivity to ensure operation parameters are met between hosts on segments or VLANs 3.2 Make adjustments as required 3.3 Validate and document network performance

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.2	Gathers, interprets and analyses current network design specifications and identifies relevant and key information
Writing	1.4, 3.3	Prepares technical documentation that incorporates an evaluation of information and specialised and cohesive language in a format and style appropriate to a specific audience
Get the work done	1.1-1.4, 2.1-2.3, 3.1-3.3	- Uses a combination of formal, logical planning processes and an increasingly intuitive understanding of context to prioritise tasks and contingency arrangements - Uses mobile communication tools and specialised software to ensure that geographically distributed team members remain connected in virtual environments - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Initiates standard procedures when responding to familiar problems within the immediate context

Reading	2.2	Gathers, interprets and analyses current network design specifications and identifies relevant and key information
Writing	1.4, 3.3	Prepares technical documentation that incorporates an evaluation of information and specialised and cohesive language in a format and style appropriate to a specific audience
Get the work done	1.1-1.4, 2.1-2.3, 3.1-3.3	- Uses a combination of formal, logical planning processes and an increasingly intuitive understanding of context to prioritise tasks and contingency arrangements - Uses mobile communication tools and specialised software to ensure that geographically distributed team members remain connected in virtual environments - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Initiates standard procedures when responding to familiar problems within the immediate context

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK418 Implement backbone technologies in a local area network	ICANWK418A Implement backbone technologies in a local area network	Updated to meet Standards for Training Packages.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK418 Implement backbone technologies in a local area network

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- define, design and document the structure of the network and subnets required for the network
- build and test an asynchronous transfer mode (ATM) local area network (LAN) that provides the required services at the required communication standards
- document resource requirements and network performance.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline current and emerging industry practice associated with:
 - bandwidth limitations, measuring and testing
 - LAN and wide area network (WAN) network topologies (three-layer LAN hierarchy: core distribution and access)
 - MAC addresses, network layer protocols
 - open systems interconnect (OSI) layer modelling
 - routers
 - virtual LANs
- identify and describe network interface cards (NICs) and switches, including:
 - fast Ethernet
 - gigabit
 - 10-gigabit Ethernet
 - store-and-forward
 - fast-forward

- fragment-free
- identify and describe internetworking protocol suites, including:
 - TCP/IP
 - IPX
 - DECnet
 - AppleTalk
 - IPv6.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- local area network infrastructure
- switches with various interfaces.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB401 Design a website to meet technical requirements

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to design a website to specifications, within a particular technical and human interface environment.

This unit applies to individuals who are responsible for analysis, documentation and design, including identifying the technical and human computer interface requirements that drive design.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Define the technical environment	1.1 Identify the business requirements 1.2 Identify the appropriate standards required to develop the site 1.3 Identify the appropriate hardware and software required
2. Define the human computer interface	2.1 Conduct a user analysis, in order to determine a user profile and user needs 2.2 Determine the user content, and requirements

ELEMENT	PERFORMANCE CRITERIA
	2.3 Determine the appropriate design principles for the site 2.4 Identify the appropriate operating system
3. Determine the site hierarchy	3.1 Identify the hierarchy of pages 3.2 Ensure that the content is logical and accessible to the user 3.3 Ensure that navigation between pages is consistent and clear
4. Integrate the design components	4.1 Apply the appropriate information hierarchy to the site design 4.2 Ensure that the design principles are appropriate to the business, and to the user 4.3 Ensure that the process flow is developed in a logical and simple manner 4.4 Test the site against user needs 4.5 Complete and document the design structure

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1-2.4, 3.1-3.3	Interprets, analyses, and synthesises, technical and organisational information to inform decision-making, to construct and validate solutions, and to produce responses to pre-determined requirements and work tasks
Writing	2.2, 3.2, 3.3, 4.5	- Develops content in a manner that supports and conveys information, using the appropriate structures, templates, software, and specialised language - Produces a logically sequenced text to convey exact procedural requirements and specific, and concise, instructions/meaning
Navigate the world of work	1.2	Takes personal responsibility for adherence to the standards of industry bodies, where related to own work context
Interact with others	2.1, 2.2, 4.2	Selects the appropriate communication protocols and conventions, when conferring with clients to elicit information, and to determine specific needs and

		requirements
Get the work done	1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 4.4	• Takes responsibility for planning, sequencing, and prioritising tasks within own workload, for efficiency and effective outcomes • Uses analytical processes to make routine and some complex decisions, to develop logical structures within the website information and operation that meet client needs • Understands the purposes, specific functions and , key features of common digital systems, tools and software, and operates them effectively to complete routine tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB401 Design a website to meet technical requirements	ICAWEB401A Design a website to meet technical requirements	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB401 Design a website to meet technical requirements

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify and select, the appropriate tools and procedures required to develop a website
- conduct a user analysis to identify the website, or design structure, required
- define the user interface
- determine the site hierarchy
- test the website, to ensure that it meets the standards required by the user.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the basic aspects of information architecture
- describe the business process design
- outline copyright and intellectual property requirements
- provide an overview of the customer, and business, liaison
- detail e-business sites and corporate strategy
- describe the implications of technology connectivity
- explain the procedures for documenting technical specifications
- discuss the relevant standards relating to website design
- compare website design methods, and standard website structures
- recognise and define, common operating systems
- recognise and operate, common computer hardware.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to the:

- analysis software
- customer relationship model
- e-business website
- requirements documentation
- site server
- site server software
- web servers
- relevant standards, and copyright information.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB402 Confirm accessibility of websites for people with special needs

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to ensure that a website is accessible to users with auditory, visual, mobility, and cognitive impairments, and those people who use assistive technology.

It applies to individuals who use analysis and technical skills, to build and test websites.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify the accessibility standards	1.1 Research and identify, specific user groups with particular accessibility requirements 1.2 Identify general legislated and industry accessibility standards, and requirements, to understand the wider context of accessibility 1.3 Identify web development standards, and prioritise application 1.4 Consolidate specific and general standards, and requirements, into an accessibility checklist for application to website related

ELEMENT	PERFORMANCE CRITERIA
	work
2. Test for website accessibility	2.1 Select and prepare, the appropriate automatic testing tools and software 2.2 Run the automatic testing tools and make document changes, based on the results 2.3 Ensure that the text equivalent for every non-text element is present in the website, where feasible 2.4 Verify that information conveyed with colour is also available without colour 2.5 Identify any changes in the natural language of a document text 2.6 Check and ensure, that the document can be read without style sheets 2.7 Check and ensure that the priorities identified in the analysis of web development standards are met and completed 2.8 Test the site with different user groups, to ensure that the site transforms successfully and maintains accessibility
3. Test the pages	3.1 Check and ensure that the pages are not dependent on colour, and can operate in a monochrome environment 3.2 Check and ensure that the pages are logical and accessible, in a text-only environment 3.3 Verify that the pages operate on a text-to-speech browser 3.4 Ensure that the accessibility of the website is signed off by the appropriate person, as meeting the web-development standards

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1-2.8	Identifies, analyses, and evaluates complex texts to determine work requirements
Writing	1.4, 2.1, 2.2, 2.4-2.8, 3.1-3.4	- Uses specific software and technical language to format, review, and amend web-based documents and diagrams - Generates checklists that include accessibility

		standards criteria and other specific requirements
Oral Communication	2.8	Participates in verbal exchanges with stakeholders, using listening and questioning to elicit information and to share viewpoints
Navigate the world of work	1.2, 1.3	Takes personal responsibility for adherence to the regulatory and legislative standards related to own work context
Interact with others	3.4	Selects and uses the appropriate conventions and protocols, to communicate with others in a specific work context
Get the work done	1.4, 2.1, 2.2, 2.7, 2.8, 3.1, 3.2, 3.3, 3.4	- Accepts responsibility and the ownership of tasks, and makes decisions on completion parameters, and the need for consultation and coordination with others - Plans, sequences and prioritises tasks, and own workload, for efficiency and effective outcomes - Understands the purposes, specific functions and the key features of common digital systems, tools and software, and operates them effectively to complete a series of diagnostic tests, and tasks, that meet prioritised web development standards for accessibility

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB402 Confirm accessibility of websites for people with special needs	ICAWEB402A Confirm accessibility of websites for people with special needs	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB402 Confirm accessibility of websites for people with special needs

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify accessibility standards
- test a website for accessibility using a range of tools and tests
- check website documents and other web components for accessibility issues
- test web pages for accessibility.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify and describe the relevant legislation, regulations and codes of practice, relating to access and equity
- describe the computing and programming standards that apply to access and equity
- describe the access and equity issues of web page design, in relation to:
 - customer and business liaison approaches, and processes
 - electronic commerce modelling language
 - government, advocacy group, and user group liaison
- discuss the application of privacy principles to website development, user access and user usage
- describe technical performance measurement principles
- describe the Web Accessibility Initiative (WAI)
- explain the importance of website accessibility, security, and equity legislation
- compare website design methods and standard website structures
- explain website security
- explain workload metrics

- list World Wide Web Consortium (W3C) standards.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- a live website
- the requirements documentation
- the customer-relationship model
- automatic accessibility measuring tools
- organisational requirements and relevant standards.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB403 Transfer content to a website using commercial packages

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to transfer content, from a remote location to a web server, using a range of commercial information and communications technology (ICT) products. The objective is the successful upload of new, or revised, information on a website.

It applies to individuals who are required to update websites.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Configure the file transfer protocol client	1.1 Review and select the file transfer protocol (FTP) client, based on features and functions 1.2 Ensure that the file transfer protocol client is suitable for the technical environment 1.3 Enter client details, including the user identity (ID), password and the host name or ID, into profile fields to create a permanent

ELEMENT	PERFORMANCE CRITERIA
	profile 1.4 Choose settings such as auto-detect, save profile, and password, depending on organisational security and privacy policy, and the organisational guidelines 1.5 Test and verify, the configuration by connecting to the web-hosting server
2. Plan and prepare for the data transfer	2.1 Prepare the data content, and back it up on the local computer or server 2.2 Identify data as compressed, or uncompressed, with the tools available on the server to manage uploaded data 2.3 Ensure that the files are in an appropriate form for recognition and interaction by the operating system 2.4 Ensure that the receiving directory structure is applicable for the data to be uploaded
3. Establish the connection to server	3.1 Log on to remote server using administrative, guest or anonymous accounts 3.2 Proceed through the security layers, based on organisational guidelines 3.3 Initiate the file transfer protocol client program and locate the destination directory
4. Transfer the data to a remote server	4.1 Select files to be transferred and choose the mode, American Standard Code for Information Interchange (ASCII), or binary 4.2 Run the antivirus software on the downloaded files 4.3 Move, rename, copy, and delete files on the server as necessary, and as permissions allow 4.4 Store and order files, according to requirements and file extensions 4.5 Conduct appropriate steps for downloaded files, such as translation, decompression, or de-archival of the files for use 4.6 Confirm the data transfer and content functionality, and close the connection

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.4, 1.5, 2.1-2.4, 3.2, 4.1-4.6	Accesses and evaluates technical information, standards, and data, to ensure alignment between work requirements, implementation protocols and specified outcomes
Writing	1.3-1.5, 2.1-2.4, 3.1-3.3, 4.1, 4.3-4.5	Uses specific standards, software and technical language to create, update, enter and verify data and information, according to work requirements, implementation protocols, and specified outcomes
Navigate the world of work	1.4, 3.2, 4.3, 4.4	Takes personal responsibility for adherence to legislative requirements and the organisational policies and guidelines, related to own work context
Get the work done	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6	- Plans, sequences and prioritises tasks and own workload, for efficiency and effective outcomes - Understands the purposes, specific functions and the key features of common digital systems, tools and software, and operates them effectively, to complete a series of sequential tasks required to prepare, and transfer, data successfully to a website

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB403 Transfer content to a website using commercial packages	ICAWEB403 A Transfer content to a website using commercial packages	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB403 Transfer content to a website using commercial packages

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- configure a file transfer protocol (FTP) client
- prepare the content to be transferred
- connect to the server
- transfer the content.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe the process of transferring content to a website including:
 - the FTP server and the client software
 - internet protocols
 - security issues
 - server access security procedures
 - server operating systems
 - website server architecture (e.g. Linux, Windows, Unix)
- outline the range of organisational policies, and procedures, that impact on web site development
- identify and describe the legislation, regulations, and codes of practice as they relate to web design, including:
 - codes of ethics
 - privacy
 - copyright
 - intellectual property.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to the:

- web servers
- e-business website
- FTP client software
- server security password, and access procedures.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB404 Maintain website performance

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to ensure that a website maintains performance levels during peak traffic times, and full use access.

It applies to individuals who use planning and analytical skills to maintain and improve website performance.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Benchmark website performance	1.1 Review client performance expectations, from the specifications and business requirements 1.2 Test the administration and maintenance requirements, against the specifications and business requirements 1.3 Establish performance benchmarks, from the specifications and business requirements 1.4 Ensure that performance benchmarks are tested

ELEMENT	PERFORMANCE CRITERIA
	1.5 Record measured performance benchmarks against the specifications
2. Track website performance	2.1 Measure actual website performance against performance benchmarks in key areas and record the outcomes 2.2 Establish policies and procedures for maintaining the stability of actions and processes related to the website 2.3 Identify faults, or suggest improvements, to the website 2.4 Implement improvements according to the business requirements and organisational policy, and procedures 2.5 Establish automatic fault reporting procedures and processes 2.6 Monitor and maintain website security measures 2.7 Implement administration and maintenance schedules 2.8 Establish preventative maintenance and administration indicators, and ensure that an alert system is enabled 2.9 Track user activities and make changes to policies or procedures, depending on the findings
3. Tune performance	3.1 Compare actual website performance against benchmarks over an appropriate period, and make changes based on inconsistencies 3.2 Record performance inconsistencies, and incorporate learning, into revised policy and procedures 3.3 Use diagnostic and software tools, to identify and correct, any website faults 3.4 Plan and action, preventative maintenance on a regular basis to ensure the continuous and consistent performance of the website 3.5 Complete and record the fault, correction and maintenance reports
4. Initiate and monitor performance improvement	4.1 Establish a mechanism for capturing client initiatives, to assist in identifying maintenance, or administration, or performance problems 4.2 Review the security tools, and procedures and conduct improvements, where necessary 4.3 Document and implement the maintenance schedules 4.4 Review the maintenance and administration documentation, according to policy and procedures, in order to identify areas for performance improvement 4.5 Update the website on a regular basis, including information,

ELEMENT	PERFORMANCE CRITERIA
	links, multimedia links, and back-end software 4.6 Provide a timely and appropriate response to the client

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2-1.3, 2.1-2.9, 3.1	Examines, constructs, organises and validates relationships between discrete, and interrelated, data and information
Writing	1.5, 2.2, 2.2, 2.9, 3.1, 3.2, 3.4, 3.5, 4.1-4.6	- Designs and develops, the procedural documents that convey critical performance information to end users - Modifies documents using on-going analysis of performance data and feedback - Prepares a well structure and cohesive document, that presents analysis of evidence and actions utilising the appropriate format, technical language, correct spelling and grammar
Numeracy	1.3, 1.5, 2.1, 3.1, 3.2, 3.5, 4.1, 4.4	Assigns a numerical value to performance requirements, and uses measurement data to inform decisions, track performance, and establish actions to be taken in relation to the required work task
Navigate the world of work	2.2, 2.4, 2.9, 3.2, 4.4	- Takes personal responsibility for following, explicit and implicit, organisational policies relevant to own work - Implements revisions to existing policies and procedures, or initiates new policies, relating to website use and performance for others
Interact with others	4.6	Selects and uses appropriate conventions and protocols, to communicate with others in a specific work context
Get the work done	1.1, 1.3, 1.4, 2.1, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 3.1, 3.3, 3.4, 4.1, 4.2, 4.3, 4.5	- Determines job specifications and requirements, and performs clearly defined tasks in a logical, systematic sequence - Uses analytical thinking and diagnostic processes - Understands the purposes, specific functions, and key features of common digital systems, tools and software, and operates them effectively

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB404 Maintain website performance	ICAWEB404A Maintain website performance	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB404 Maintain website performance

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- review and establish, website performance benchmarks
- ensure that the website meets specifications
- identify and rectify faults, where the performance is not met
- implement scheduled and non-scheduled maintenance
- effectively monitor, and tune, website performance.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe the process of maintaining a website performance including:
 - security issues
 - website server architecture (e.g. Linux, Windows, Unix)
 - website security protocols
 - workload (web traffic) metrics
- outline the business process design methodologies
- identify and describe legislation, regulations, and codes of practice as they relate to web performance, including:
 - codes of ethics
 - privacy
 - copyright
 - intellectual property.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- web servers and websites
- the technical requirements
- web traffic diagnostic tools, including timing tools to gauge website response times
- the appropriate learning and assessment support, when required
- the relevant organisational policies and procedures.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB405 Monitor traffic and compile website traffic reports

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to monitor website traffic and to compile traffic reports as specified.

It applies to individuals who are required to maintain websites.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Select web traffic monitoring tools	1.1 Identify and analyse the available site-analysis software, according to organisational requirements, and the website architecture 1.2 Choose and install the most suitable site-analysis software or internet service provider, according to the vendor requirements 1.3 Identify the required report options, according to organisational requirements and the website architecture 1.4 Develop a traffic monitoring program

ELEMENT	PERFORMANCE CRITERIA
2. Monitor web traffic	2.1 Specify the required traffic reports, according to information requirements 2.2 Generate the required traffic reports 2.3 Analyse the reports, to identify improvements to the server and to site performance 2.4 Apply forecasting methodologies to predict traffic peaks
3. Make recommendations for improvements	3.1 Recommend any changes in hardware and software 3.2 Implement the changes, as directed 3.3 Continue the traffic monitoring program, as required

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 2.1, 2.3	Identify, analyse and evaluate, a range of organisational documents and technical information
Writing	1.4, 2.1-2.3, 3.1	- Constructs a data collection tool, incorporating the timelines and information to be collected - Prepares a technical report, using the appropriate punctuation, language and layout, in order to convey the results and recommendations of investigations
Numeracy	1.3, 1.4, 2.3, 2.4	Evaluates and presents, numerical and statistical data, to inform decisions and actions
Navigate the world of work	1.1, 1.3, 2.1	Takes personal responsibility for following explicit and implicit organisational requirements, relevant to own work
Interact with others	3.1, 3.2	Selects and uses the appropriate conventions and protocols, when communicating in a range of familiar work contexts
Get the work done	1.1, 1.2, 1.4, 2.2, 2.4, 3.1, 3.2, 3.3	- Determines job specifications and requirements, and performs clearly defined tasks in a logical, systematic sequence - Uses analytical thinking and diagnostic processes, to monitor the web server and site performance, and to

		suggest improvements • Understands the purposes, specific functions, and key features of common digital systems, tools and software, and operates them effectively to monitor website traffic to meet requirements

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB405 Monitor traffic and compile website traffic reports	ICAWEB405A Monitor traffic and compile website traffic reports	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB405 Monitor traffic and compile website traffic reports

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- select and install the site-analysis software, or an internet service provider (ISP)
- monitor website traffic
- generate and analyse traffic reports
- recommend and implement changes, as required.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe the problems and challenges that arise with an organisation web site related to:
 - data queues and bottlenecks
 - website security
 - website copyright and intellectual property requirements
- identify and describe legislation, regulations, and the codes of practice as they relate to monitoring website traffic, including:
 - codes of ethics
 - privacy
- describe the process of monitoring website traffic, including:
 - functionality of network device drivers
 - functionality of network operating systems
 - queuing systems
 - website architecture
 - workload metrics

- server design and functionality
- outline the features and functionality of commercially available:
 - log file analysis software
 - traffic tracking software
 - network device drivers
 - network operating systems
 - queuing systems.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- analysis software
- the e-business website
- a web server

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB406 Create website testing procedures

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to design and implement procedures, which measure the performance of a website, and compare these procedures to the initial design specifications.

It applies to individuals who may use significant judgement in planning, design, evaluation, technical or leadership and communications functions in frontline technical support roles.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Document and define the performance criteria	1.1 Review the performance specifications and determine the benchmark criteria 1.2 Validate and document the performance functions 1.3 Select the measurement methodology, and test it on the website 1.4 Validate each performance function separately 1.5 Record and document the metric tools, using the appropriate

ELEMENT	PERFORMANCE CRITERIA
	methodology 1.6 Prepare the performance benchmarks, and seek agreement on the criteria with the client
2. Validate the performance measures	2.1 Develop inspection and test plans, in order to validate performance measures throughout the performance cycle 2.2 Test the performance functions, and record the results, according to technical documentation standards 2.3 Compare the results of performance function testing to benchmark 2.4 Redesign functions that do not meet the appropriate performance benchmarks 2.5 Re-implement functions that have been redesigned during performance testing 2.6 Document the benchmarks and obtain sign-off
3. Obtain sign-off	3.1 Validate and document, performance standards and benchmarks 3.2 Submit the methodology and function testing document, and results, to the client for approval 3.3 Review client comments and make changes, as appropriate 3.4 Obtain sign-off for the website testing procedure

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.6, 2.1-2.5, 3.1, 3.3	Evaluates, integrates, and confirms the authenticity of the data and information, to reach an understanding of the contextual and procedural nature of business solutions
Writing	1.2, 1.5, 1.6, 2.1, 2.2, 2.6, 3.1-3.3, 3.4	- Develops and documents benchmark standards, performance plans, measurements, and detailed results, and recommendations for client approval - Uses the appropriate formats and writing principles, in accordance with technical standards and organisational

		conventions
Oral Communication	1.6, 2.6, 3.2-3.4	Participates in complex verbal exchanges with clients that require active listening and responses to questions, to elicit relevant and specific information, and to obtain feedback, and consensus
Numeracy	1.1-1.6, 2.1-2.6, 3.1	Measures and evaluates performance, against established baseline numerical values
Navigate the world of work	2.2, 2.6	Takes personal responsibility for following explicit, and implicit, organisational requirements relevant to own work
Interact with others	1.6, 3.2, 3.4	Selects and uses, the appropriate conventions and protocols, when communicating in a range of familiar work contexts
Get the work done	1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3	- Uses analytical thinking, systematic decision- making and diagnostic processes, to determine, implement and evaluate, testing and validation processes - Understands the purposes, specific functions and the key features of common digital systems, tools and software, and operates them effectively, to perform testing procedures to meet requirements

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB406 Create website testing procedures	ICAWEB406A Create website testing procedures	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB406 Create website testing procedures

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify the critical functions to be tested
- develop the appropriate metrics for each function, and assign the benchmarked performance standards
- test each performance function, and compare against the appropriate benchmarks
- validate the performance of the site against technical requirements
- document the results, to establish performance benchmarks for subsequent development of the site.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify and describe the legislation, regulations, codes of practice, and standards as they relate to web testing, including:
 - codes of ethics
 - privacy
 - copyright
 - intellectual property
 - naming
 - documentation
- describe the client business domain, including client organisation structure and business functionality
- identify current industry-accepted hardware and software products

- outline the desktop applications and operating systems, as required by organisational guidelines
- describe queuing systems, workload metrics, and user request classes
- describe the key features, and use of, a standard generalised markup language (SGML) and its associated standards
- explain standard web-testing procedures and optimisation tools
- outline website design methodologies and standard website structures.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- analysis software
- the e-business website
- industry standards, and organisational guidelines
- site design and technical requirements documentation
- site-development software and tools.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB407 Conduct operational acceptance tests of websites

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to provide high-level assurance, that websites can be effectively and efficiently provisioned and deployed live, in a systematic manner.

It applies to individuals employed as web designers and web developers who are involved in testing the effectiveness of websites.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the test	1.1 Establish and document, the testing framework and schedule 1.2 Determine the processes and functions to be tested, and assign the quantitative and qualitative performance benchmarks to each process and function 1.3 Benchmark and document the page templates, style guides and expected traffic loads

ELEMENT	PERFORMANCE CRITERIA
	1.4 Determine and document the test methodology 1.5 Assemble and brief, the testing panel on the conduct of the test 1.6 Develop user and installation manuals, according to the target audience's understanding and needs
2. Test individual pages	2.1 Test the pages, against style guides and templates 2.2 Test the pages, for consistency in structure and content 2.3 Apply the automatic testing software 2.4 Document page gross statistics of confirmed results of tests
3. Test page relationships against the business requirements	3.1 Test the installation, and the examples listed in instruction manual 3.2 Test page navigability using a variety of browsers 3.3 Test the ease of use and functionality against the requirements 3.4 Test software interface points, against the business and technical requirements 3.5 Test site security and privacy against the business requirements 3.6 Test the response time against the business requirements 3.7 Conduct load simulation testing, using single and multiple independent browsers, or automated load testing tools
4. Apply and document further tests	4.1 Test the website's ability to handle concurrent access 4.2 Test conformance to the applicable privacy, accessibility, and acceptable usage policy standards 4.3 Apply the automatic testing software 4.4 Collect, collate and document the results from the sample user, and data from the automated test
5. Evaluate the test results	5.1 Consolidate and compare the results to the benchmarks 5.2 Identify results that fail to meet the benchmarks, and conduct a site remedial iteration 5.3 Record and document the test results as the site performance baseline, against which further development or updating can be measured 5.4 Provide evaluation feedback to the appropriate person 5.5 Ensure that the appropriate person signs off on the site, prior to the 'go live' date

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.4, 2.1-2.3, 3.1-3.7, 4.1, 4.2, 5.1, 5.2	Examines, constructs, organises and validates relationships, between both discrete and interrelated data and information
Writing	1.6, 2.4, 4.4, 5.1-5.5	- Produces a concise formal document that conveys technical information and procedures, utilising the appropriate format, technical language, correct spelling and grammar - Uses specific software and technical language to create, format, review, save and access documents
Oral Communication	1.5, 5.4, 5.5	- Conveys information by participating in verbal exchanges including listening, questioning and discussing, data and information with a group of people in order to elicit an understanding of, and obtain a consistency of approach to, work requirements - Uses clear and detailed verbal language in order to convey explicit information, and to elicit approval for proposed solutions and activities
Numeracy	1.2, 2.4, 5.1, 5.3	Determines analyses and presents, numerical and statistical, data to inform the decisions and actions to be taken to achieve pre-determined outcomes
Navigate the world of work	3.4, 3.5, 3.6, 4.2,	Ensures compliance of the product against business requirements and against the protocols
Get the work done	1.1-1.6, 2.1-2.4, 3.1-3.7, 4.1-4.4, 5.1-5.5	- Sequences and schedules complex activities, monitors implementation, and manages relevant communication - Develops options, resolves issues, designs and implements tests, to ascertain the functionality of solutions prior to full implementation - Utilises a combination of lateral and analytical thinking, to design, and refine, ideas to suit needs, resources and constraints - Uses a range of digitally-based technologies and the software packages and hardware required for creating, and refining, websites

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB407 Conduct operational acceptance tests of websites	ICAWEB407A Conduct operational acceptance tests of websites	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB407 Conduct operational acceptance tests of websites

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare an operational acceptance test that measures the independent and integrated structural content, and the technical components, of the site
- apply automatic testing software and collect, collate and document the results or tests
- evaluate and provide feedback on the test results.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the client business domain
- describe the structure, function and business organisation of the client, including the business-process design
- identify the organisational policies and procedures that cover routine work processes, and the use of:
 - web optimising tools
 - web monitoring tools
 - web testing procedures
- describe technical performance measurement
- explain website accessibility and equity principles
- outline website structures, design and testing methodologies, and standards
- describe common website security issues and the methods employed to mitigate risk
- list and describe, common testing software and the metrics used
- identify and describe, the application of common website testing software.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances should be typical of those experienced in the website technologies field of work, and include access to:

- special purpose tools, equipment and materials including:
 - web servers
 - the e-business website
 - the site server
- relevant industry software packages, including site server software and analysis software
- the organisational requirements documentation, customer relationship model, website manuals and instructions.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB408 Ensure basic website security

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to provide basic website server, and protocol security appropriate to the level required by an organisation.

It applies to individuals employed as web maintenance staff who are required to ensure that a website meets basic security requirements.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine business security requirements	1.1 Identify the level of security required based on the business, and the commercial intent of the website 1.2 Identify whether password protection is needed for the site, or part of the site 1.3 Decide on minimum or maximum password protection solutions, based on the business requirements
2. Ensure web server	2.1 Ensure that the web server password is obscure and

ELEMENT	PERFORMANCE CRITERIA
security	non-traceable 2.2 Install and maintain an effective intrusion detection system, according to business requirements 2.3 Ensure that user accounts have only the required permissions on the server 2.4 Ensure that interpreters' programs, that run common gateway interfaces (CGIs), are not stored in the CGI-bin directory 2.5 Ensure that web forms check data before passing it to the server
3. Ensure protocol security	3.1 Protect the fixed internet connection, and the internet protocol (IP) address 3.2 Protect shared network resources from intrusion, according to business requirements 3.3 Ensure that personal computer (PC) protocols and preferences follow security protocols 3.4 Disable control protocol, or internet protocol (TCP/IP), bindings for file and printer sharing 3.5 Ensure that network basic input/output system (NetBIOS) over TCP/IP is disabled

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1-2.5, 3.1-3.5	- Identify and evaluate technical information to produce solutions to business requirements - Identify critical information and cross check for accuracy
Writing	2.2, 3.1-3.5	Writes and edits, computer code and technical data, ensuring the correct syntax and accuracy
Oral Communication	1.1, 1.2	Listens and asks questions to elicit information
Navigate the	1.3	Ensures the compliance of the product against the business requirements and protocols

world of work		
Get the work done	1.1-1.3, 2.1-2.5, 3.1-3.5	- Plans approach to work based on the analysis of business needs and requirements - Sequences, schedules and prioritises own work activities - Resolves issues and implements tests, to ascertain the functionality of solutions prior to full implementation - Utilises a combination of lateral and analytical thinking, to evaluate and validate reliability, and the efficacy of the website - Uses a range of digitally-based technologies, and the software packages and hardware, required for interrogating vendor databases and websites

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB408 Ensure basic website security	ICAWEB408A Ensure basic website security	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB408 Ensure basic website security

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify the level of security required by the business for the website
- implement password protection solutions, for the website and the server
- install and maintain, an intrusion detection system
- implement protocol security.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the client business domain, including the client organisation structure and business functionality
- identify current industry-accepted hardware and software products
- outline desktop applications and operating systems, as required
- describe firewall functionality
- describe hypertext transfer protocol (HTTP) and disk and executing monitor tools (daemons)
- outline the range of security protocols, including:
 - secure socket layer (SSL)
 - point-to-point network tunnelling protocol (PPTP)
 - layer 2 tunnelling protocol (L2TP)
- define security patches
- explain specific purpose security computers, acting as bastion hosts
- explain web-server operating systems.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances should be typical of those experienced in the website technologies field of work, and include access to:

- special purpose tools, equipment, materials
- industry software packages
- a basic website and web servers
- the organisational requirements documentation
- website manuals and instructions.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB409 Develop cascading style sheets

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0

Application

This unit describes the skills and knowledge required to develop cascading style sheets (CSS) that are attached to a markup language document, in order to externally define, and control, styles to enhance and achieve commonality between web documents.

It applies to individuals who are required to layout and ensure consistency of appearance between web pages.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Format, style and lay out the elements on a web page	1.1 Obtain user requirements 1.2 Style the elements of a web page using CSS 1.3 Apply CSS to multiple pages in a website 1.4 Position the document elements using CSS
2. Test and validate the web pages	2.1 Test the website in various browsers

ELEMENT	PERFORMANCE CRITERIA
	2.2 Validate CSS against industry standards 2.3 Report the test results to the appropriate person

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1, 2.2	Identifies, interprets and uses information from technical and business documents to complete a work task
Writing	1.1-1.4, 2.3	Uses specific software and technical language to create, format, review, save and access web- based documents, diagrams and images
Oral Communication	1.1, 2.3	- Identifies work outcomes through open-ended questioning, active listening, paraphrasing and summarising - Uses clear and detailed verbal language in order to convey explicit information
Numeracy	1.2-1.4	- Extracts and evaluates the mathematical information embedded in a range of tasks and texts - Takes measurements and performs calculations for website layout
Navigate the world of work	1.1, 2.2	Completes work to user requirements and industry standards
Get the work done	1.1-1.4, 2.1-2.3	- Sequences and schedules complex activities within the specified timeframe, monitors implementation, and manages relevant communication - Analyses documentation in order to apply and obtain desired results, and to resolve problems - Utilises a combination of lateral and analytical thinking, to design and refine solutions that are adaptable to different contexts - Uses a range of digitally-based technologies, and the software packages and hardware required

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB409 Develop cascading style sheets	ICAWEB409A Develop cascading style sheets	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB409 Develop cascading style sheets

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0

Performance Evidence

Evidence of the ability to:

- develop a website style and format, using cascading style sheets (CSS), to user requirements
- lay out page elements, using CSS
- test web pages in a variety of browsers
- validate the CSS against industry standards.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- discuss standard web and CSS design principles
- identify and describe the application of the following to CSS:
 - hypertext transfer protocol (HTTP)
 - hypertext mark-up language (HTML)
 - extensible hypertext mark-up language (XHTML)
 - industry standards for web design
- recognise a range of internet browsers.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances should be typical of those experienced in the website technologies field of work and, include access to:

- special purpose tools, equipment and materials
- industry software packages
- a computer
- a variety of web browsers
- the organisational requirements documentation including:
 - an aesthetic presentation brief
 - website manuals
 - HTML documents
- the internet, for access to the World Wide Web Consortium (W3C).

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB410 Apply web authoring tool to convert client data for websites

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0

Application

This unit describes the skills and knowledge required to use web development software to create website content. The unit is designed to use a web-authoring tool to convert text and images to the appropriate web protocols.

It applies to individuals employed as web developers who are responsible for developing websites using client data.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Create the files	1.1 Create files and save, in the correct location and directory 1.2 Insert and format text content, according to the business requirements 1.3 Insert and optimise images, as required
2. Create the formatting	2.1 Create basic external cascading style sheets (CSS)

ELEMENT	PERFORMANCE CRITERIA
templates	2.2 Define styles for the required tags, according to the business requirements 2.3 Link CSS to the files, and display formatting
3. Define library items	3.1 Identify items that recur on several pages, and include in the library 3.2 Format selected items, according to CSS definition 3.3 Check the tags of selected items 3.4 Create and clearly name, the selected library items 3.5 Update the items contained in the library, according to the business requirements
4. Develop the templates	4.1 Create and save file as template, and link with CSS 4.2 Format the template and create, and name, editable regions 4.3 Place the generic image icons in a page, as required by the business image 4.4 Save and modify the templates
5. Identify the authoring requirements	5.1 Select the preferred web authoring tool, according to the business requirements 5.2 Set the preferences for the web-authoring tool, including the site file transfer protocol (FTP) client 5.3 Customise and navigate, the web author tool environment or workspace, to meet individual requirements 5.4 Select buttons and tools, both opened and closed, to access the full range of features 5.5 Define and name the site and root folder
6. Create simple forms	6.1 Add form elements to the page 6.2 Set the form element properties for each form element 6.3 Insert additional fields, as required for the processing form 6.4 Identify the availability, and location, of the common gateway interface (CGI) script 6.5 Connect the form to a script in a server CGI bin 6.6 Test the form to ensure that there are no errors
7. Create simple navigation	7.1 Create the site map in order to plan navigation 7.2 Create the links between pages to reflect the content structure,

ELEMENT	PERFORMANCE CRITERIA
	using both text and images 7.3 Check the links in multiple browsers for errors 7.4 Check the website content across a number of different browsers, and browser versions, to ensure consistency of presentation, performance and accessibility

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 3.1, 3.2, 3.5, 5.1-5.5	Identifies, and interprets, information from technical and business documentation to complete a work tasks, according to the business requirements and technical specifications
Writing	1.1-1.3, 2.1-2.3, 3.2, 3.4, 3.5, 4.1-4.4, 5.2-5.5, 6.1-6.5, 7.1-7.3	- Uses specific software and technical language to create, format, review, save and access web based documents, templates, diagrams and images - Electronically enters data and information that meet business requirements, and adheres to the technical requirements and specifications
Navigate the world of work	1.1, 2.2, 3.5, 5.1	Completes tasks in accordance with the specified business requirements
Get the work done	1.1-1.3, 2.1-2.3, 3.1-3.5, 4.1-4.4, 5.1-5.5, 6.1-6.6, 7.1-7.4	- Prioritises and monitors own work - Solves operational problems, as they arise - Analyses the business requirements and interprets the technical aspects of implementation - Designs simple forms - Operates software applications, selects the appropriate authoring tools to meet the required specifications, and writes and maintains, the hypertext markup language (HTML)

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB410 Apply web authoring tool to convert client data for websites	ICAWEB410A Apply web authoring tool to convert client data for websites	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB410 Apply web authoring tool to convert client data for websites

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop web content, using authoring tools to meet the business requirements
- create cascading style sheets (CSS)
- define library items
- create templates
- use authoring tools to create cross-browser web documents
- create forms
- create navigation tools.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify and describe, the client business domain
- identify and describe the legislation, regulations, codes of practice and standards, as they relate to websites
- outline the accessibility guidelines regarding web-authoring tools
- explain the standard generalised markup language (SGML), and describe the associated standards
- describe standard web and CSS design principles and structures.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances should be typical of those experienced in the website technologies field of work, and include access to:

- special purpose tools, equipment and materials
- industry software packages
- the website, where content may be developed
- site authoring software and tools
- the business expectations brief
- the appropriate standards, and current legislation.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB411 Produce basic client-side script for dynamic web pages

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0

Application

This unit describes the skills and knowledge required to develop interactive and engaging websites, using a range of features from various, appropriate languages.

It applies to individuals working in web development environments who are required to produce client-side scripts as a common means of creating interactive websites. These scripts offer an effective simple means of enabling websites to provide greater interaction with clients.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Analyse the requirements for web documents	1.1 Determine the necessary dynamic functionality of the web document 1.2 Determine the appropriate language to achieve that functionality 1.3 Determine the web document requirements

ELEMENT	PERFORMANCE CRITERIA
2. Design and produce web documents	2.1 Design the web document, and embedded scripts to achieve the required functionality 2.2 Write a simple hypertext markup language (HTML), considering accessibility 2.3 Write embedded scripts
3. Test the scripts and debug	3.1 Test the web document against the required functionality, and reiterate until correct 3.2 Complete the documentation and submit it to the appropriate person for their approval

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3	Recognises and interprets textual information in various information and communications technology (ICT) languages, in order to determine the dynamic functionality of the web document
Writing	1.1, 1.3, 2.1, 2.2, 2.3, 3.2	Develops material for a specific audience, using detailed ICT language, to convey explicit information
Oral Communication	1.1, 1.3	Articulates clearly, using the specific language suitable to technical, operational and business audiences, to convey requirements and listening, and questioning, techniques to confirm understanding
Get the work done	1.1-1.3, 2.1-2.3, 3.1-3.2	- Plans approach to work based on internet protocols, and the analysis of business needs and requirements - Sequences, schedules and prioritises own work activities - Resolves issues, including design and functionality conflicts, debugging and handling errors, and implements tests to ascertain the functionality of solutions, prior to full implementation - Utilises a combination of lateral and analytical thinking, and practice, to design and validate the reliability, and efficacy of web documents

		Uses a range of digitally-based technologies, software packages, and hardware to view the active elements or objects across different platforms, and to design, and produce, web documents

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB411 Produce basic client-side script for dynamic web pages	ICAWEB411A Produce basic client-side script for dynamic web pages	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB411 Produce basic client-side script for dynamic web pages

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- determine the dynamic functionality and requirements of web documents
- select the appropriate language
- design web documents with embedded script
- produce dynamic web page documents
- test and debug, the web document functionality
- document and gain client approval.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- discuss the basic principles behind open platform programming
- describe client-side scripting and its application to dynamic web page design, including:
 - events and event handlers
 - internet operation related to servers and clients
 - internet protocols
 - standard generalised markup language (SGML)
 - associated standards
- identify and outline, security restrictions on servers
- describe the difference between server-side and client-side scripting
- describe the standards associated with programming documentation.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances should be typical of those experienced in the website technologies field of work, and include access to:

- special purpose tools
- equipment and materials
- industry software packages
- the web server
- the client requirements
- the security policy
- functionality and scope requirements.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB412 Produce interactive web animation

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to create interactive animated enhancements, to advertisements and web pages.

It applies to individuals working as web designers who generate and apply advertisements for website clients, create animations to enhance a web page message and produce fully animated websites.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Analyse project requirements	1.1 Determine the necessary dynamic functionality of the animation to be included inside the web document 1.2 Determine the appropriate language to achieve that functionality 1.3 Determine web document requirements 1.4 Research and evaluate, current requirements for online

ELEMENT	PERFORMANCE CRITERIA
	advertising with major agencies and websites
2. Design the web animations	2.1 Design the web document and animations, to enhance the page 2.2 Design the advertisements to promote the web page, within a website 2.3 Design the advertisements to promote the web page, on externally hosted, paid advertising 2.4 Design advertisements that meet current website advertising specifications for size, number or loops, sound and buttons 2.5 Design and create gif replacements for animation, as per major advertising agency requirements 2.6 Design the animations for a website that will add to the overall professionalism, or entertainment value, of a website
3. Produce the animations	3.1 Produce the web animations, for web pages 3.2 Produce the web animations, for external advertising 3.3 Produce the web animations, for internal website advertising 3.4 Produce the web animations, for a website that will enhance the overall professionalism, or entertainment value, of the website 3.5 Test and debug, scripts against the required functionality and reiterate until correct
4. Publish animations	4.1 Publish the animations in an acceptable web format 4.2 Incorporate the web animations into a hypertext markup language (HTML) page 4.3 Complete the documentation and submit it to the appropriate person for their approval

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	1.4, 2.1, 2.2, 2.3, 3.4	Identifies and explores, connections between ideas and methodologies, and uses research techniques to source the knowledge required to resolve technical difficulties, and the extend understanding of the job's

		requirements
Reading	1.4, 2.4, 2.5	Analyses and compares industry-specific and related text, to determine all advertising, client and technical requirements
Writing	1.1	Prepares, and produces, dynamic material for a specific audience using clear and detailed language in order to convey explicit information, requirements and recommendations
Oral Communication	1.1	Clearly articulates requirements, using the language appropriate to the audience and environment, and participates in a verbal exchange of ideas/solutions
Numeracy	2.4	Interprets numerical information, and applies basic mathematical calculations, to recurring technical features
Get the work done	1.1-1.4, 2.1-2.6, 3.1-3.5	- Takes responsibility for planning, sequencing and prioritising tasks and own workload, for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Uses familiar digital technologies and systems to access information, search and enter, data and code, present information, and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB412 Produce interactive web animation	ICAWEB412A Produce interactive web animation	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB412 Produce interactive web animation

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- determine the requirements for the animation
- design the interactive animations requirements
- create animations for web pages and advertising applications
- publish the animations to the web environment.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline web animation programming concepts, including:
 - acceptable formats for importing assets
 - component libraries
 - cross-browser issues
 - importing and exporting libraries
 - inserting the published work to a hypertext markup language (HTML), or extensible hypertext markup language (XHTML) page
 - internet-animation player statistics
 - masking
 - movements and automated movements
 - publishing the finished work to an acceptable web format
 - shape animation and manipulation
 - symbols
 - text manipulation

- transparencies
- explain programming control structures, object-oriented programming, including:
 - buttons
 - scripting to go to uniform resource locators (URLs)
 - scripting to jump to different parts of the animation
 - scripting using the programming language
- summarise internet technology, including selecting the right scripting type to reach a maximum determined audience
- outline the principles of the analysis of web parameters, and the design of suitable animations, for advertisements and website enhancements
- explain the methods and attributes of animation, and how it enhances the website to entice buyers.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- a development environment
- the internet
- browsers
- the appropriate web design software.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB413 Optimise search engines

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to create and implement, good internet-marketing practices using search engine optimisation (SEO) techniques, including introducing web pages to search engines, and monitoring search engine performance.

It applies to individuals who make recommendations and monitor keyword enhancements, search engine marketing (SEM) and social network marketing (SNM).

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Analyse internet-marketing requirements	1.1 Determine the main business of the website, and the keywords currently used on each page 1.2 Create a keyword suggestion list for the website, using online tools 1.3 Analyse the best keywords for macro and sub-keywords 1.4 Create recommendations for improved optimisation for image search optimisation (ISO), keyword density on web pages, and

ELEMENT	PERFORMANCE CRITERIA
	keywords used in headings and heading levels meta-elements and page tiles 1.5 Analyse the pages, and recommend sections for content 1.6 Analyse the current website position in organic listings 1.7 Analyse the current success of online advertising 1.8 Analyse current traffic analysis reports, using online tools and the web-hosting statistics 1.9 Analyse the current success of the social network marketing content
2. Prepare an internet marketing strategy report	2.1 Use detail from the analysis to prepare a recommendation report for the client, covering the differences between search engine optimisation, search engine marketing, and social network marketing 2.2 Make recommendations about search engines and social network media to the target, based on the volume of users 2.3 Make recommendations regarding a timeframe for expecting improved search engine results 2.4 Explain the search terms 2.5 Make recommendations for the implementation of search engine optimisation, and search engine marketing, including a summary of recommendations on the methods to improve search engine rankings, both organic and pay per click (PPC)
3. Implement the SEO strategy	3.1 Implement the macro and sub-keywords on pages 3.2 Implement keywords 3.3 Implement the sections for content, and back links from quality websites 3.4 Create online profiles for updating search engine data 3.5 Introduce the website to major search engines
4. Review the SEO	4.1 Determine current website position in organic listings 4.2 Review the current success of online advertising with regard to the website's position 4.3 Evaluate current traffic analysis reports, and compare these with previous results
5. Prepare a client SEO result report	5.1 Analyse website statistics, for site reports and listings 5.2 Compare current statistics with previous site reports and

ELEMENT	PERFORMANCE CRITERIA
	listings
	5.3 Summarise the findings, and make further recommendations

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 4.3, 5.1, 5.2	Critically analyses complex documentation from a variety of sources, and consolidates the information relating to specific criteria, to determine requirements
Writing	1.2, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 3.2, 3.4, 3.5, 5.1, 5.3	Accurately records and completes organisational documents, and correspondence, using clear language and the correct spelling, grammar and terminology
Oral Communication	1.1, 2.2, 2.3, 2.4, 2.5, 5.3	Uses collaborative and inclusive techniques, including active listening and questioning, and the reading of verbal and non-verbal signals, to convey and clarify information, and to confirm understanding
Numeracy	2.2, 2.3, 5.1, 5.2	- Interprets statistical information, and compares information, to measure usage and prepare client reports - Uses mathematical calculations to estimate timeframes for improved search engine results
Get the work done	1.1-1.9, 3.1-3.5	- Takes responsibility for planning, sequencing and prioritising tasks and own workload, for efficiency and effective outcomes - Addresses less predictable problems and initiates standard procedures in response to these problems, applying problem-solving processes to determine a solution - Contributes to continuous improvement of current work, by applying basic principles of analytical and lateral thinking - Uses familiar digital technologies and systems to access information, search and enter data and code, present information and communicate with others

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB413 Optimise search engines	ICAWEB413A Optimise search engines	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB413 Optimise search engines

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- analyse internet marketing requirements
- prepare and implement, an internet search engine marketing strategy
- monitor search engine performance
- make recommendations for:
 - keyword enhancements
 - search engine marketing (SEM)
 - social network marketing (SNM).

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe internet marketing methods and best practices, including:
 - search terms
 - keywords
 - keyword density
 - search engine ranking
 - search engine methods of assessing search engine optimisation (SEO)
 - back links
 - social network media in the context of SEO
- analyse and interpret, the internet marketing strategy of a website.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in website technologies field of work, and include access to the:

- website files
- file transfer protocol (FTP)
- internet
- profiling tools
- social network marketing logins.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB414 Design simple web page layouts

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to scope web page requirements, and to create and implement designs.

It applies to individuals working as web designers and web developers, who apply a wide range of knowledge and skills for basic web development.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify main layout sections from design specification	1.1 Identify the required sections of the web page 1.2 Create the web page structure
2. Layout the web page to match design specification	2.1 Position document elements 2.2 Style web page elements to match the design specifications
3. Test and validate the	3.1 Test the website in various browsers

ELEMENT	PERFORMANCE CRITERIA
layout	3.2 Validate the web pages against industry standards

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	1.1	Identifies and explores, the connections between ideas and methodologies to extend the understanding of requirements
Reading	2.2, 3.2	Recognises and interprets textual information, in order to determine and adhere to, requirements
Writing	1.1	Develops clear and well-organised material for a specific audience, using precise language to convey explicit information, and requirements
Oral Communication	1.1	Clearly articulates requirements, using the language appropriate to the audience and environment, and participates in a verbal exchange of ideas/solutions
Numeracy	1.2, 2.1	Takes measurements, and performs calculations for the web page layout
Navigate the world of work	3.2	Identifies and acts on issues that contravene the relevant industry standards
Get the work done	1.2, 2.1, 2.2, 3.1, 3.2	- Takes responsibility for planning, sequencing, and prioritising tasks and own workload, for efficiency and effective outcomes - Addresses less predictable problems, and initiates standard procedures in response to these problems, applying problem-solving processes in determining a solution - Uses familiar digital technologies and systems to access information, search and enter data, and code, present information and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB414 Design simple web page layouts	ICAWEB414A Design simple web page layouts	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB414 Design simple web page layouts

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop a website according to design specifications
- lay out page elements
- test the web pages in a variety of browsers
- validate the web pages, against industry standards.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise standard web and web scripting design principles
- define and explain the application of the following for website development:
 - cascading style sheets (CSS)
 - the hypertext transfer protocol (HTTP)
 - a markup language, such as hypertext markup language (HTML), or extensible hypertext markup language (XHTML)
 - World Wide Web Consortium (W3C) standards.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- a computer

- an aesthetic presentation brief
- a variety of browsers
- the internet, to validate against the W3C.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB415 Produce server-side script for dynamic web pages

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce server-side scripts for dynamic web pages, using a range of relevant features from different but appropriate languages.

It applies to individuals working as web designers who apply a wide range of knowledge and skills across different information and communications technology (ICT) environments to support small to medium enterprises (SMEs) that require broader, rather than more specialised, ICT support.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Analyse the requirements for web documents requiring server-side dynamic interaction	1.1 Determine the necessary dynamic functionality of the web document 1.2 Determine the appropriate language, to achieve that functionality 1.3 Determine web document requirements

ELEMENT	PERFORMANCE CRITERIA
2. Design server-side scripts	2.1 Design the web document and server-side code, to interact with an external data source 2.2 Design the web document and server-side code, to allow an administrator to insert, update, and delete entries to the external data source 2.3 Implement security features in the web document
3. Produce the web documents	3.1 Write the extensible hypertext markup language (XHTML), considering accessibility 3.2 Write server-side scripts to current XHTML standards
4. Test the scripts and debug	4.1 Test the web document against required the functionality and reiterate until correct 4.2 Complete the documentation and submit it to the appropriate person for their approval
5. Set up security	5.1 Determine the necessary permissions to prevent error messages displaying to the public 5.2 Configure server software to minimise potential database attacks

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3	Identifies, analyses and evaluates workplace instructions and technical documentation, to determine all business requirements
Writing	2.2, 2.3, 3.1, 3.2, 4.2	Develops clear and well-organised material for a specific audience, using precise language to convey explicit information requirements and recommendations
Oral Communication	1.1, 1.3	Clearly articulates requirements using the language appropriate to the audience, and participates in a verbal exchange of ideas/solutions
Navigate the	3.2	Identifies and complies with the current standards

world of work		
Interact with others	4.2	• Uses a range of strategies to establish a sense of connection, and to build rapport, with clients and co-workers
Get the work done	1.2, 2.1, 2.2, 2.3, 4.1, 5.1, 5.2	• Takes responsibility for planning, sequencing and prioritising tasks and own workload, for efficiency and effective outcomes • Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations • Uses familiar digital technologies and systems to access information, search and enter, data and code, present information and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB415 Produce server-side script for dynamic web pages	ICAWEB415A Produce server-side script for dynamic web pages	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB415 Produce server-side script for dynamic web pages

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- create dynamic web pages according to all job requirements, using server-side scripting to retrieve information from a web-hosted database
- create scripts for:
 - the quick upload of data to web-hosted databases
 - inserting, updating, and deleting data from a web server database
 - encoding passwords
 - uploading and retrieving images
 - managing sessions, and creating a secure login.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain server-side technologies, and the relevant web scripting languages
- discuss server-side web analysis and design parameters
- summarise and apply, programming control structures and object-oriented programming
- outline web-programming concepts including:
 - the hypertext transfer protocol (HTTP)
 - stateless programming
 - session management
 - authentication and web security.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to the:

- client requirements
- functionality and scope requirements
- security policy
- database server
- internet and server
- software development environment
- web browsers.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB416 Customise content management system

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to create and integrate, a website into an open-source content management system.

It applies to individuals working as web developers who apply a wide range of knowledge and skills, across ICT, to support small to medium enterprises (SMEs) that require broader, rather than more specialised, ICT support.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Analyse the specifications and requirements	1.1 Determine the required functionality of the website 1.2 Determine the appropriate server-side language that will be used to produce the website 1.3 Determine the content structure and navigation of the website 1.4 Determine the pre-existing restraints that need to be considered when developing a website solution

ELEMENT	PERFORMANCE CRITERIA
2. Research the requirements	2.1 Research the appropriate solutions, based on website requirements, including the programming language, content management system (CMS), licensing structure and hosting structure 2.2 Research the techniques, plug-ins and additions to the existing content management system, in order to allow the solution to fulfil the needs determined while analysing website requirements
3. Create a content-management system powered website	3.1 Install and configure the chosen CMS 3.2 Insert and manage, the website content 3.3 Install and implement the appropriate techniques, and plug-ins
4. Validate and evaluate the final website	4.1 Validate the final website markup against current website standards 4.2 Validate the content management system performance in different browsers, checking compatibility, and core content management system functionality

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	1.1, 1.2, 1.4, 2.1, 2.2	Researches, analyses and validates information to determine the best solution for client requirements, and builds on prior knowledge to extend understanding
Reading	1.1, 1.2, 2.1, 2.2	Identifies, analyses and evaluates industry standards, workplace instructions, online and other technical documentation, to determine all business requirements
Writing	3.2	Develops clear and well-organised material for a specific audience, using precise language to convey explicit information requirements, and recommendations
Oral Communication	1.1, 1.2	Clearly articulates requirements, using language appropriate to the audience and participates in a verbal exchange of ideas/solutions
Navigate the	2.1	Takes personal responsibility for following explicit and implicit requirements for licencing policies,

world of work		procedures and regulatory requirements
Get the work done	1.1-1.4, 2.1-2.2, 3.1-3.3, 4.1, 4.2	• Takes responsibility for planning, sequencing and prioritising tasks and own workload, for efficiency and effective outcomes • Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations • Addresses less predictable problems, and initiates standard procedures in response to these problems, applying problem-solving processes in determining solutions • Uses familiar digital technologies and systems to access information, search and enter, data and code, present information and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB416 Customise content management system	ICAWEB416A Customise content management system	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB416 Customise content management system

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- research and evaluate client requirements
- create a content management system (CMS) powered website using an open-source solution
- validate the CMS against the standards set by the World Wide Web Consortium (W3C).

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- define "content management system" and describe its purpose
- explain markup language and its associated standards
- outline server-side language and security techniques
- discuss web accessibility
- evaluate a content management system (front and backend) in commonly used browsers
- outline W3C standards and their application to website development.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- the client requirements, and content
- a text editor
- a range of browsers

- the internet for research and code validation.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB417 Integrate social web technologies

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to successfully develop and integrate social networking code into new and existing websites.

It applies to individuals working as web developers who apply a wide range of knowledge and skills across a range of general information and communications technology (ICT) environments and support small to medium enterprises (SMEs) that require broader, rather than more specialised, ICT support.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Analyse the specifications and requirements	1.1 Evaluate different popular social networking websites 1.2 Discuss the benefits of social networking in websites 1.3 Discuss the negative aspects of social networking 1.4 Define goals, based on the client requirements, for successful social networking integration

ELEMENT	PERFORMANCE CRITERIA
2. Develop the code and documentation	2.1 Develop the guidelines for implementing social networking in a website 2.2 Develop the code to integrate a social networking website, into a pre-existing website 2.3 Use the pre-existing scripts and tools, to integrate a social networking website into a pre-existing website
3. Validate the integration	3.1 Validate social networking integration 3.2 Validate the performance of the social networking integration in different browsers, checking compatibility and display

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.4, 2.3, 3.2	Analyses and consolidates information and data, from a range of sources, against the defined criteria and requirements, and checks for accuracy and completeness
Writing	1.4, 2.1, 2.2	Develops clear and well-organised material for a specific audience, using precise language to convey explicit information requirements and recommendations
Oral Communication	1.2, 1.3	Determines and confirms client requirements using collaborative and inclusive techniques, including active listening and questioning, and reading of verbal and non-verbal signals, to convey and clarify information and to confirm understanding
Interact with others	1.2, 1.3	Selects and uses the appropriate conventions and protocols, when communicating with clients in a range of work contexts
Get the work done	1.1, 1.4, 2.1-2.3, 3.1, 3.2	- Takes responsibility for planning, sequencing and prioritising tasks, and own workload, for efficiency and effective outcomes - Makes routine decisions, and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine

		situations • Addresses less predictable problems and initiates standard procedures in response to these problems, applying problem-solving processes in determining a solution • Uses familiar digital technologies and systems, to access information, search and enter, data and code, present information and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB417 Integrate social web technologies	ICAWEB417A Integrate social web technologies	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
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Assessment Requirements for ICTWEB417 Integrate social web technologies

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- analyse requirements for the integration of a social networking website into a pre-existing website
- determine the content management functionality, against current programming and security standards
- select an appropriate social networking platform
- develop and implement, social networking integration codes into an existing website
- validate frontend code markup, against the standards set by the World Wide Web Consortium (W3C).

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the markup language and its associated standards
- summarise server-side language
- describe the advantages and disadvantages, of integrating social networking into web sites.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- client requirements

- a text editor
- a range of browsers
- the internet for research
- application programming interface (API) documentation.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB418 Use development software and ICT tools to build a basic website

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to build a basic website, consistent with the design, technical requirements and expectations, of a client's business, using current industry software and tools.

It applies to individuals working as web developers who use a wide range of knowledge and skills across a range of general information and communications technology (ICT) environments, and support small to medium enterprises (SMEs) that require broader, rather than more specialised, ICT support.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Select and analyse the website structure and development tools	1.1 Analyse the business specification, and select the appropriate software 1.2 Identify the website's technical needs, and select the appropriate software tools

ELEMENT	PERFORMANCE CRITERIA
	1.3 Identify the site's structure and navigation flow, and demonstrate an understanding of functionality 1.4 Review the design documentation, and integrate the design work with the site's structure and navigation, according to web development standards
2. Begin site construction	2.1 Take action to ensure user input during website construction 2.2 Validate the existing information and basic content, when incorporating data on the website 2.3 Apply consistent design specifications to all aspects of the website 2.4 Gather feedback from the user on web design, content, accessibility and structure, using the appropriate feedback mechanism
3. Complete and validate the website construction and content	3.1 Undertake an evaluation of the website, against the technical requirements and the design specification 3.2 Test each function, and, process of the website 3.3 Conduct navigation tests and hypertext markup language (HTML) compliance with website standards 3.4 Stress test the website to meet the design criteria and user load 3.5 Record testing results to ensure that the website meets user requirements 3.6 Obtain the sign-off and approval of the user

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.4, 3.1	Critically analyses complex documentation from a variety of sources, and consolidates information relating to specific criteria to determine requirements
Writing	2.1, 2.4, 3.5, 3.6	Prepares and produces dynamic material for a specific audience, using clear and detailed language in order to convey explicit information, requirements and recommendations

Oral Communication	2.1, 2.4, 3.6	Uses collaborative and inclusive techniques, including active listening and questioning, and reading of verbal and non-verbal signals, to convey and clarify information, and to confirm understanding
Navigate the world of work	1.4, 3.3	- Accepts responsibility and ownership for the task, and makes decisions on completion parameters, and the need for coordination with others - Takes personal responsibility for following explicit and implicit policies, procedures and standards
Interact with others	2.1, 2.4, 3.5, 3.6	- Selects and uses appropriate conventions and protocols, when communicating with clients in a range of work contexts - Uses a range of strategies, to establish a sense of connection, and to build rapport with clients and co-workers - Elicits and provides feedback to others
Get the work done	1.1-1.4, 2.2, 2.3, 3.1-3.4	- Takes responsibility for planning, sequencing, and prioritising tasks and own workload, for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Addresses less predictable problems and initiates standard procedures in response to these problems, applying problem-solving processes in determining a solution - Uses familiar digital technologies and systems, to access information, search and enter data, and code, present information and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB418 Use development software and	ICAWEB418A Use development software and	Updated to meet Standards for Training	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
ICT tools to build a basic website	IT tools to build a basic website	Packages. Minor change to title.	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB418 Use development software and ICT tools to build a basic website

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- conduct an assessment of, and document the specifications relating to, the client's website needs
- build a basic website according to client specifications
- validate the final web design against the client's requirements
- confirm and obtain client sign off.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline a basic knowledge of:
 - design principles
 - the issues around accessibility and equity principles, when building for diverse users
- identify and describe the software, and tools, that are used in website development
- outline the general principles of the standard generalised markup language (SGML), and associated documentation standards
- outline the principles of website design
- describe the technical attributes specific to the web
- describe and apply, the types of code used in the generation of web sites.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- basic website specifications and guidelines
- the website development software and tools
- an internet server
- organisational and industry standards.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB419 Develop guidelines for uploading information to a website

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to support the effective operation of a website, by establishing content upload guidelines and procedures, in the context of site policies.

It applies to individuals who work in website maintenance roles who are required to ensure that a website remains operational.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Develop site policies	1.1 Develop and disseminate policies on acceptable usage, security, privacy and copyright issues, based on technical security and privacy requirements 1.2 Develop and disseminate, roles and responsibilities for updating and loading content, and removing redundant information 1.3 Document and disseminate information about the nature of

ELEMENT	PERFORMANCE CRITERIA
	content able to be updated and loaded 1.4 Establish the upload documentation, and disseminate the processes and procedures for the updating, loading or removal of content on the site 1.5 Implement automatic and routine, updating and archiving procedures
2. Establish the updating and loading procedures	2.1 Allocate, and make available to contributors, directory space to update and load new site content 2.2 Identify and make available for use, authoring guides and resources, based on cascading style sheets (CSS) and business style guides 2.3 Develop and make available, new content templates to be applied by authors for use based on CSS parameters 2.4 Allocate and monitor server permissions 2.5 Identify preferred file transfer protocol (FTP) client based on best fit with the technical environment, and make available for use 2.6 Customise the FTP client to meet requirements 2.7 Identify and develop authoring support tools, such as help files and links 2.8 Disseminate authoring support tools, such as help files and links, as necessary
3. Document the guidelines	3.1 Develop documentation for loading information, taking into consideration security and privacy 3.2 Document and make available, links to recommended support tools 3.3 Automate the details of recent updates and loading of information, and document on the site

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.2, 2.5	Critically analyses complex documentation from a variety of sources, and consolidates information, relating

		to specific criteria to determine requirements
Writing	1.1-1.5, 2.3, 2.7, 3.1-3.3	Develops procedural material for a specific audience, using clear and detailed language, in order to convey explicit information, requirements and recommendations
Navigate the world of work	1.1, 1.2, 1.5, 3.1	- Modifies or develops organisational policies and procedures, to comply with legislative requirements and organisation goals - Contributes to roles and responsibilities, of self and others
Interact with others	1.1-1.4, 2.1, 2.4, 2.8, 3.2	- Selects and uses, the appropriate conventions and protocols when communicating with clients and co-workers, in a range of work contexts - Uses a range of strategies to establish a sense of connection, and to build rapport with clients and co-workers - Cooperates with others, and contributes to work practices, where joint outcomes are expected, and deadlines are to be met - Identifies and explores, differences in a diverse range of people in the work context, and makes adjustments to communication in recognition of these differences
Get the work done	1.1-1.5, 2.1, 2.2, 2.4-2.7, 3.3	- Takes responsibility for planning, sequencing and prioritising tasks and own workload, for efficiency and effective outcomes - Contributes to the continuous improvement of current work practices, by applying basic principles of analytical and lateral thinking - Uses familiar digital technologies and systems to access information, search and enter data, present information and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB419 Develop guidelines for uploading	ICAWEB419A Develop guidelines for uploading	Updated to meet Standards for Training	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
information to a website	information to a website	Packages	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB419 Develop guidelines for uploading information to a website

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop a policy for uploading and removing website content that:
 - ensures that the policy reflects the strategic intent of the site, while maintaining site security and privacy standards
 - adheres to quality standards for the updating process and data
 - ensures that updates occur in a secure and convenient manner
 - develops updating and loading procedures for website content
 - reviews guidelines for uploading content to websites.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline copyright and intellectual property issues
- summarise the information architecture
- identify and describe, internet protocols
- outline the procedures for disseminating and documenting technical specifications
- clarify the website's architecture and business process design, and how e-business sites may fit into corporate strategy.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- the servers
- an e-business website
- the file transfer protocol (FTP) software
- the organisational documentation, requirements and guidelines.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB420 Write content for web pages

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to write concise, and clear, content for web pages on behalf of a client.

It applies to individuals who are proficient communicators in the web development field.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to develop content for the site	1.1 Identify customer information needs, with reference to the audience, site functionality and client requirements 1.2 Confirm site purpose and functionality, with reference to client specification 1.3 Select content channels and format as part of client requirements 1.4 Obtain the templates and style guides 1.5 Identify the content and analyse with reference to audience

ELEMENT	PERFORMANCE CRITERIA
	needs, maintenance requirements, information architecture, and site design and functionality 1.6 Negotiate any alterations to site design, as required by the content and by client requirements
2. Write the site content	2.1 Create the content according to content and client requirements 2.2 Establish that the content is easily and conveniently, accessible and visible, and that information is clear, understandable, and logical 2.3 Edit the content with reference to audience needs, site functionality, content and client requirements
3. Upload the content	3.1 Log into the server site, using either the administrative or anonymous file transfer protocol in preparation for upload 3.2 Launch the transfer file transfer protocol (FTP) client, and navigate to the destination directory, either graphically or by using a command line interface 3.3 Store and order the files according to logical design and user needs, using an accepted file extension scheme 3.4 Demonstrate the operation in closed contention mode

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.6, 2.1-2.3, 3.1-3.3	Reads and interprets specifications, computer program interface and other documentation, from a variety of sources, and consolidates information, to determine requirements
Writing	1.2, 1.6, 2.1, 2.3, 3.1-3.3	Writes, edits and proofreads documents for internet use, to ensure clarity of meaning, and accuracy and consistency of information
Oral Communication	1.1, 1.2, 1.6	Determines and confirms client requirements, using collaborative and inclusive techniques, including active listening and questioning, and reading of verbal and non-verbal signals, to convey and clarify information, and to confirm understanding

Get the work done	1.1, 1.3-1.5, 2.2, 2.3, 3.1-3.4	• Takes responsibility for planning, sequencing, and prioritising tasks and own workload, for efficiency and effective outcomes • Makes routine decisions, and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations • Uses familiar digital technologies and systems to access information, search and enter, data and code, present information, and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB420 Write content for web pages	ICAWEB420A Write content for web pages	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB420 Write content for web pages

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- write content for web pages that recognises cultural differences and diversity, in developing website content
- upload content for a website
- remove content on a website.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline content features, including clarity, ease of viewing and readability
- explain copyright and intellectual property legislation, relating to web page content
- summarise the document design, web design and usability
- discuss the functions and features of:
 - micro-content elements, such as headings, highlighted words and link text
 - style guides, such as cascading style sheets (CSS)
- explain the information architecture
- summarise the instructional design principles
- outline the obligations of merchants and service providers
- outline the organisational requirements relating to web page content and user diversity
- explain privacy requirements relating to web page content.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- copy edit resources
- culturally reviewed content
- style guides and templates
- the website specifications
- word-processing and web development software
- the organisational documentation, and industry requirements.
-

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB421 Ensure website content meets technical protocols and standards

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to ensure content for a website is in accordance with customer specifications, and is compatible with the appropriate technical and infrastructure protocols.

It applies to individuals working in the web development area who are required to populate websites according to clear benchmarks.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm that content meets the required standards	1.1 Take action to ensure that text-based content meets client needs, and the required style standards 1.2 Confirm that the multimedia-based content meets the business design standards, or the overall look of the website 1.3 Check that the mix between multimedia and text-based content, provides the required level of interaction identified in the

ELEMENT	PERFORMANCE CRITERIA
	project brief 1.4 Test that the content conforms to client expectations and the technology
2. Confirm that the technology supports the content	2.1 Take action to ensure that the protocols required for multimedia content are available 2.2 Check and confirm, that the bandwidth required to support the content is available 2.3 Check and confirm, that the servers support the content and levels of interaction 2.4 Check and confirm, that the plug-ins required to support content are made available 2.5 Test and confirm, that compression techniques support delivery of content
3. Test the content	3.1 Test and confirm that content displays as intended and according to business requirements in target browsers 3.2 Test with beta users that content encourages interaction and content interaction performs as intended and record results 3.3 Test and confirm that plug-ins download with a minimum of steps, complication and time 3.4 Test that interactive tools are available and provide the expected results

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.3, 1.4, 2.2, 3.1	Identifies and analyses, online information and client specifications, to ensure that all business requirements are met
Writing	3.2	Documents outcomes of tests using industry relevant terminology and recognised symbols
Oral Communication	1.1	Clearly articulates requirements, using the language appropriate to the audience, and participates in a verbal exchange of ideas/solutions

Numeracy	3.3	Uses basic mathematical formula to time technological processes
Navigate the world of work	1.1, 1.2, 3.1	Takes personal responsibility for following explicit and implicit policies, procedures and specifications
Interact with others	1.1, 1.2, 3.2	- Elicits feedback and provides feedback to others, in order to improve work practices and processes - Selects and uses the appropriate conventions and protocols, when communicating with clients and co-workers in a range of work contexts
Get the work done	1.1, 1.4, 2.1-2.5, 3.1-3.4	- Takes responsibility for planning, sequencing and prioritising tasks and own workload, for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Uses familiar digital technologies and systems to access information, search and enter, data and code, present information, and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB421 Ensure website content meets technical protocols and standards	ICAWEB421A Ensure website content meets technical protocols and standards	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB421 Ensure website content meets technical protocols and standards

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- carry out checks and tests, for a mix of content for a website, to ensure that it meets specifications and standards
- check and use, correct streaming and compression techniques
- manage the file transfer protocols (FTPs)
- test and confirm, content functionality and operability.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the applicability of copyright, privacy and intellectual property to website development
- explain common software compression algorithms, and associated technologies
- summarise the file transfer protocol (FTP) software protocols
- identify and summarise internet protocols
- explain the server access security principles and procedures
- outline the server operating systems
- summarise streaming technologies.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work and, include access to:

- documents detailing organisational style guide or policies
- a personal computer, on which software installation may be performed
- compression and streaming software
- an internet connection
- a live network
- network components, hardware and software
- networked computers
- a server, and workstation hardware and software
- style guides, and the design brief
- technical documentation and installation manuals
- software currently used in industry
- vendor hardware and software components.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB422 Ensure website access and useability

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to apply the principles of accessibility and equity in the context of website development.

It applies to individuals who are proficient communicators and who provide frontline technical support for ensuring that websites are accessible to end users.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Design a site user test	1.1 Establish the usability test methods 1.2 Identify critical business functions 1.3 Identify the full range of users 1.4 Confirm user expectations through market analysis, business intelligence and customer feedback 1.5 Establish the performance potential of the business, from the business requirements or other approved sources

ELEMENT	PERFORMANCE CRITERIA
	1.6 Establish the performance measurement and success criteria, to measure actual performance against user expectations 1.7 Test the site when ready and record the outcomes
2. Conduct the user test	2.1 Document the process performance indicators and benchmarks, and disseminate them to a sample group of users 2.2 Assemble a full representative range of users and preferred technologies, to test site features and functions, based on the business specification 2.3 Ensure maximum user satisfaction, through ease of navigation controls and design 2.4 Ensure that user and legal, accessibility, privacy and equity requirements and expectations are met
3. Evaluate the user test	3.1 Collate site performance results and measure them against performance indicators and benchmarks, based on user expectations 3.2 Identify performance shortfalls, and ensure that acceptable performance solutions are developed according to business requirements 3.3 Establish an evaluation feedback mechanism and provide to users
4. Document the results	4.1 Identify solutions to the problems encountered during the testing phase 4.2 Discuss problems with developers and ensure that the solutions are continuously refined 4.3 Ensure that the proposed solutions meet business requirements and user expectations 4.4 Document the final solutions in line with organisational guidelines, and distribute to the appropriate person

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description

Reading	1.2, 1.3, 1.4, 1.5, 2.2, 3.1, 3.2, 4.3, 4.4	Analyses and consolidates information and data from a range of sources, against the defined criteria and requirements, and checks for accuracy and completeness
Writing	1.5, 1.6, 1.7, 2.1, 3.1, 3.2, 3.3, 4.4	Accurately records information and prepares correspondence, and documentation, using clear language, and organisational formats and protocols
Oral Communication	1.4, 1.5, 4.2, 4.3	Uses listening and questioning skills to confirm understanding for requirements, participates in a verbal exchange of ideas/solutions, and uses appropriate, detailed and clear language, to address key personnel and website users
Numeracy	3.1, 3.2	Performs mathematical calculations to analyse test and performance data, and statistics
Navigate the world of work	2.2, 2.4, 4.4	Takes personal responsibility for following explicit and implicit policies, procedures and legislative requirements
Interact with others	2.1-2.3, 3.3, 4.4	- Selects and uses appropriate conventions and protocols, when communicating with clients and co-workers in a range of work contexts - Elicits feedback and provides feedback to others, while testing usability
Get the work done	1.1-1.7, 2.1-2.3, 3.1, 3.2, 4.1-4.3	- Takes responsibility for planning, sequencing and prioritising tasks and own workload, for efficiency and effective outcomes - Addresses less predictable problems, and initiates standard procedures in response to these problems, applying problem-solving processes in determining solutions - Uses familiar digital technologies and systems to access information, search and enter data, and code, present information and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB422 Ensure	ICAWEB422A Ensure website	Updated to meet	Equivalent

Code and title current version	Code and title previous version	Comments	Equivalence status
website access and useability	access and useability	Standards for Training Packages	unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB422 Ensure website access and useability

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- research user needs
- design a valid usability test, and set benchmark metrics
- facilitate the test process and document the results
- document and propose solutions, to meet user needs and the current, and future, needs of the business.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the principles of accessibility and equity, in the context of website development
- outline the technical performance measurement of a typical web site
- describe common user testing principles and techniques
- outline the following important considerations for a website:
 - architecture
 - privacy
 - security
- describe workload metrics, and explain the implications for website design
- describe the website design as it applies to:
 - business process
 - customer and business liaison
 - electronic commerce modelling language
- outline the organisational policies and procedures relating to website functionality.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- analysis software
- the e-business website
- the organisational policy and procedures
- the requirements documentation
- a site server
- site server software
- web servers.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB423 Ensure dynamic website security

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to ensure, and maintain, the security of a dynamic commercial website.

It applies to individuals working as website developers responsible for security of dynamic websites, who are proficient communicators and can analyse technical data capably and with efficiency.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Undertake the risk assessment	1.1 Identify the functionality and features of the website, and confirm these with the client 1.2 Identify security threats, with reference to the functionality of the site and organisational security policy, legislation and standards 1.3 Complete a risk analysis to prioritise the security threats, and identify system vulnerabilities

ELEMENT	PERFORMANCE CRITERIA
	1.4 Identify resource and budget constraints, and validate with the client as required 1.5 Source the appropriate products, security services and equipment, according to enterprise purchasing policies
2. Secure the operating systems	2.1 Identify operating system (OS) and cross-platform vulnerabilities 2.2 Make the appropriate scripting or configuration adjustments, with reference to the functionality of the site and the security policy 2.3 Identify and rectify weaknesses specific to the OS
3. Secure the site server	3.1 Configure the web server securely, with reference to the required functionality and the security policy 3.2 Review and analyse, server-side scripting with reference to the required functionality and the security policy 3.3 Install firewalls as required 3.4 Establish access control permissions to the server and database
4. Secure data transactions	4.1 Identify data transactions, with reference to the functionality and features of the website 4.2 Identify and apply, the channel protocols related to the requirements 4.3 Install and configure, the payment systems
5. Monitor and document the security framework	5.1 Develop a program of selective independent audits and penetration tests 5.2 Determine the performance benchmarks 5.3 Implement audit and test programs, and record, analyse and report the results 5.4 Make security framework changes based on the test results 5.5 Develop the site-security plan, with reference to the security policy and requirements 5.6 Develop and distribute, related policy and procedures to the client

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3-1.5, 2.1, 2.3, 3.2, 4.1, 4.2, 5.4	Reads and interprets plans, specifications, computer program interface, and other documentation from a variety of sources, and consolidates information to determine requirements
Writing	1.1, 1.3, 1.4, 2.2, 3.3, 4.3, 5.1, 5.2, 5.3, 5.5, 5.6	Makes adjustments to software scripting, and creates procedural and related workplace documentation, for a specific audience, using clear and detailed language in order to convey explicit information
Oral Communication	1.1, 1.3, 1.4, 5.3, 5.6	Uses listening and questioning skills to confirm understanding for technical, operational and business requirements, participates in a verbal exchange of ideas/solutions, and uses appropriate, detailed and clear language to address the client
Numeracy	1.4, 1.5, 4.3	Undertakes numerical analyses during testing, and calculates, and evaluates system results and performance
Navigate the world of work	1.2, 1.5, 3.1, 3.2, 5.5	- Accepts responsibility and ownership of tasks, and makes decisions on completion parameters, and the need for coordination with others - Takes personal responsibility for following explicit and implicit policies, procedures and legislative requirements
Interact with others	1.1, 1.4, 5.6	Selects and uses, the appropriate conventions and protocols, when communicating with clients and co-workers in a range of work contexts
Get the work done	1.1-1.5, 2.2, 2.3, 3.2-3.4, 4.3, 5.1-5.5	- Takes responsibility for planning, sequencing and prioritising tasks and own workload, for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Addresses less predictable problems and initiates standard procedures in response to these problems, applying problem-solving processes in determining a solution - Uses familiar digital technologies and systems to access information, search and enter, data and code,

		present information, and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB423 Ensure dynamic website security	ICAWEB423A Ensure dynamic website security	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB423 Ensure dynamic website security

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- determine the client security framework, and its requirements
- identify any potential security threats to a website, and document the risk and performance benchmarks
- develop and implement, strategies to secure a dynamic website.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise the Australian Computer Society Code of Ethics
- explain a client business domain, its structure, function and organisation, including the organisational issues surrounding security
- identify and outline the legislation, regulations, and codes of practice pertinent to website information, including:
 - copyright
 - intellectual property
 - privacy
 - ethics
- outline current industry-accepted hardware and software products
- describe desktop applications and operating systems (OS), as they relate to website security
- explain the functions and features of:
 - automated intrusion detection software
 - authentication and access control

- common stored account payment systems
- cryptography
- common gateway interface (CGI) scripts
- generic secure protocols
- stored-value payment systems
- explain the implications of network address translation (NAT), related to:
 - securing internal, internet protocol (IP) addresses
 - buffer overruns and stack smashing
 - operating system deficiencies
 - the protocol stack for internet communications
 - physical web server security, particularly remote
- describe the advantages, and disadvantages, of using a range of security features
- identify and describe, host security threats.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- a dynamic website
- a security plan
- the user requirements
- all relevant legislation, standards and organisational requirements.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB424 Evaluate and select a web hosting service

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to determine a client's current and future internet service providers (ISPs) needs.

It applies to individuals working in information and communications technology (ICT) who take responsibility for comparing and evaluating internet service provider (ISP) services, and are technically adept and proficient communicators, with a broad knowledge of internet technologies.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Select the ISP	1.1 Review comparable characteristics of a range of hosting services 1.2 Review the client usage, and ensure that email and mailing list services are flexible enough, to meet current and future business needs 1.3 Review the support service standards, to ensure that they meet

ELEMENT	PERFORMANCE CRITERIA
	the business needs 1.4 Ensure that the ISP hosting service has sufficient data capacity to cover partial outages 1.5 Determine the availability of security technologies 1.6 Determine the availability of scripting languages 1.7 Evaluate optional server applications for advanced web business functions 1.8 Confirm the client selection criteria, and select the ISP hosting service that best matches the criteria
2. Ensure guarantee of a permanent online presence	2.1 Establish that the web-hosting service has systems in place to monitor server performance and availability 2.2 Negotiate the escalation procedures and performance standards with the ISP 2.3 Establish that the security and backup procedures are articulated, and that they meet business needs
3. Ensure that the web host meets the technical requirements	3.1 Take action to ensure that the operating system supports the preferred business development software, applications, extensions and databases 3.2 Establish that the web-host servers support dynamic websites, using the preferred business technologies 3.3 Establish that the web host provides current, and future, disk space requirements 3.4 Establish that site-analysis reports are available, and are flexible enough to meet business needs 3.5 Establish that security systems and payment technologies, meet business and customer expectations, and requirements
4. Benchmark performance and test it against specified criteria	4.1 Test the performance of the ISP during on and off peak times, and record the outcomes 4.2 Establish that email and mailing services have backup procedures in place, and are protected from damage, erasure or unwanted damage 4.3 Take action to ensure that the support services perform according to business needs

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.8, 2.1, 3.1	Reads and interprets specifications, the computer program interface, and documentation from a variety of sources, and consolidates information to determine requirements
Writing	2.1-2.3, 3.5, 4.1	Prepares documentation expressing ideas, explores complex issues, and is constructed logically, succinctly and accurately
Oral Communication	2.2, 2.3	Uses listening and questioning skills to confirm understanding for all business requirements, participates in a verbal exchange of ideas/solutions, and uses appropriate, detailed and clear language to address client and ISP personnel
Numeracy	1.4	Uses mathematical formulas to estimate data storage requirements
Interact with others	2.2, 2.3	Selects and uses, the appropriate conventions and protocols, when communicating with clients and co-workers in a range of work contexts
Get the work done	1.1, 1.2, 1.4, 1.8, 2.1-2.3, 3.1-3.5, 4.1-4.3	- Takes responsibility for planning, sequencing and prioritising tasks and own workload, for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Addresses less predictable problems and initiates standard procedures in response to these problems, applying problem-solving processes in determining a solution - Uses familiar digital technologies and systems to access information, search and enter, data and code, present information, and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB424 Evaluate and select a web hosting service	ICAWEB424A Evaluate and select a web hosting service	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB424 Evaluate and select a web hosting service

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- assess client needs for the current and future needs of the business
- select an internet service provider (ISP)
- evaluate the web hosting service by ensuring that:
 - the price meets the client's budgetary requirements
 - the security and technical requirements of the business are met
- comply with the client benchmarks, and test
- monitor the performance of the ISP during on and off peak times.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline different web hosting service provision options, and their scalability
- discuss internet security issues
- explain the operating systems used by ISPs
- summarise performance expectations from customers and end users
- outline server technologies
- summarise web hosting services, and performance benchmarks.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- hosting plans, prices and service agreements
- the current technology underpinning the ISP, and the services offered
- a business plan, outlining the future directions for the business.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB425 Apply structured query language to extract and manipulate data

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce structured query language (SQL) statements to work with server-side scripts, enabling web designers to interact with web server databases.

It applies to individuals who are employed as web designers responsible for creating server-side interaction with dynamic web pages, using SQL as a means of communicating with the database.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify SQL requirements from the specification documentation	1.1 Determine the information to be used from the database 1.2 Identify the tables that hold this information 1.3 Identify the primary keys in these tables 1.4 Identify the relationships between these tables, including

ELEMENT	PERFORMANCE CRITERIA
	foreign keys
2. Create a relational database	2.1 Create tables in a database, using SQL statements 2.2 Identify the primary and foreign keys for database table 2.3 Manipulate the data in a database, using SQL statements 2.4 Query the database, using SQL statements 2.5 Write SQL statements to retrieve information from the database
3. Test SQL results	3.1 Construct test data to test SQL statements 3.2 Determine the expected results in order to verify SQL statements 3.3 Verify the result of the constructed SQL statements, against the expected results

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.4, 2.3, 3.3	Analyses and consolidates information and data from a range of sources, against the defined criteria and requirements, and checks for accuracy and completeness
Writing	2.1, 2.3-2.5, 3.1, 3.2	- Uses clear and specialised technical syntax when creating codes and interrogating databases - Prepares and produces, diagrammatic models and associated documents, that that convey complex relationships between data
Get the work done	1.1, 1.4, 2.2-2.5, 3.2, 3.3	- Takes responsibility for planning, sequencing and prioritising tasks and own workload, for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Addresses less predictable problems and initiates standard procedures in response to these problems, applying problem-solving processes in determining a

		solution • Uses familiar digital technologies and systems to access information, search and enter, data and code, present information, and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB425 Apply structured query language to extract and manipulate data	ICAWEB425A Apply structured query language to extract and manipulate data	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB425 Apply structured query language to extract and manipulate data

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify structured query language (SQL) requirements
- create the databases and tables
- generate queries for one or more tables, to provide the required data
- add, modify and delete records from the database tables
- test and verify SQL statements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the features and application of the following aggregate functions:
 - MIN
 - MAX
 - SUM
 - AVG
 - COUNT
 - COUNT(*)
- explain the features and application of the following clause functions:
 - GROUP BY
 - HAVING
 - ORDER BY
 - dates and times
 - SQL data types

- numbers
- text
- SQL syntax:
- SELECT
- FROM
- WHERE
- LIKE
- DISTINCT
- CREATE
- ALTER TABLE
- INSERT INTO
- UPDATE
- DELETE
- DROP
- describe the principles of "combining and/or condition" in SQL statements and Boolean operators:
 - IN and BETWEEN conditional operators
 - mathematical operators
 - table joins (relationships).

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- a development environment
- a database server.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB429 Create a markup language document to specification

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to use a text editor to design, create and save web pages to a given specification, rather than using an authoring tool.

It applies to individuals working as web designers and developers who interpret client briefs, generate a framework for internet information, and are resourceful in their application of technology in using a markup language.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Analyse the specifications and requirements	1.1 Determine the uses and audience of the document 1.2 Determine the appropriate markup language, based on the document's uses and audience, and current industry best practice 1.3 Determine the document structure
2. Create the document	2.1 Create and assign the basic elements of the document, taking

ELEMENT	PERFORMANCE CRITERIA
structure	into account accessibility 2.2 Mark-up the sections of the document required to describe the structure
3. Incorporate the web page components	3.1 Identify the web page components 3.2 Evaluate suitable web page components 3.3 Include the required web page components
4. Validate the documents	4.1 Validate the markup language document, against the specifications and record the outcomes 4.2 Validate the markup language document in different browsers for compatibility, and record the outcomes

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 4.1, 4.2	Identifies, analyses and evaluates instructions, technical information and industry guidelines, to determine client needs and business requirements
Writing	1.3, 2.1, 2.2, 3.3, 4.1, 4.2	- Produces documentation for a specific audience, using clear and detailed language in order to convey explicit information - Writes, edits and proofreads documents to ensure clarity of meaning, and accuracy and consistency of information
Navigate the world of work	1.2	Takes personal responsibility for following explicit and implicit policies, procedures and industry best practice
Get the work done	1.1, 1.2, 3.1, 3.2, 4.1, 4.2	- Takes responsibility for planning, sequencing and prioritising tasks and own workload, for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Addresses less predictable problems and initiates standard procedures in response to these problems,

		applying problem-solving processes in determining a solution • Uses familiar digital technologies and systems to access information, search and enter, data and code, present information, and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB429 Create a markup language document to specification	ICAWEB429A Create a markup language document to specification	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB429 Create a markup language document to specification

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- design, create and save a document using a markup language, without using an automated code generation program
- use a text editor for generating the markup language code for use on common web browsers
- validate the markup document against the standards set by the World Wide Web Consortium (W3C).

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- recognise and outline the use of markup languages including:
 - dynamic hypertext markup language (DHTML)
 - hypertext markup language (HTML)
 - standard generalised markup language (SGML)
 - virtual reality modelling language (VRML)
 - extensible hypertext markup language (XHTML)
 - extensible markup language (XML)
- identify and describe, standards applicable to a markup language
- summarise the range of available web browsers and their accessibility
- identify and describe, the issues of accessibility.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- an organisational style guide or policy
- all user requirements
- a text editor
- a range of browsers
- the internet, to validate the markup.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB502 Create dynamic web pages

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to produce both server and client-side content.

It applies to individuals working as web developers who are responsible for creating dynamic pages to provide interaction between the user and the website. They use highly developed technical and analytical skills when developing the user-website interface.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify the client and server-side dynamic content	1.1 Review the technical requirements 1.2 Identify the sections of the website, requiring client-side dynamic content 1.3 Identify the sections of the website, requiring server-side dynamic content 1.4 Select the appropriate languages and technology to meet the

ELEMENT	PERFORMANCE CRITERIA
	requirements
2. Create the dynamic content	2.1 Create pages using the appropriate languages 2.2 Ensure that the code conforms to current industry best practice and standards
3. Test the dynamic pages	3.1 Test the website in a variety of browsers 3.2 Ensure that the required dynamic content functions according to the specified requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 3.2	Critically analyses documentation from a variety of sources and records, and consolidates information, to determine requirements
Writing	2.1	- Prepares documentation expressing ideas, explores complex issues, and is constructed logically, succinctly and accurately - Writes and edits computer code, and technical data, to ensure the correct syntax and accuracy
Navigate the world of work	2.1	Takes full responsibility for following policies, procedures and standards
Get the work done	1.2-1.4, 3.1, 3.2	- Accepts responsibility for planning and sequencing complex tasks and workload, negotiating key aspects with others and taking into account capabilities, efficiencies and effectiveness - Applies systematic and analytical decision-making processes for complex and non-routine situations - Uses and investigates new digital technologies, and applications, to manage and manipulate data, and to communicate effectively with others in a secure and stable digital environment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB502 Create dynamic web pages	ICAWEB502A Create dynamic web pages	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB502 Create dynamic web pages

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce dynamic web pages that include both client and server-side dynamic content
- create efficient and effective code to meet technical requirements
- test the website and code in a variety of web browsers.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain web-programming concepts, including:
 - authentication and web security
 - hypertext transfer protocol (HTTP)
 - session management
 - stateless programming
- identify and describe internet technologies including:
 - programming control structures
 - object-oriented programming
- recognise and outline various web browsers.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- a development environment
- a server
- a database server
- browsers.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

ICTWEB510 Analyse information and assign meta tags

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to analyse material and assign meta tags to ensure the accurate and consistent retrieval of information by users.

It applies to individuals in a range of information and communications technology (ICT) areas that use various techniques and software to create, update and enhance meta tags according to industry guidelines and client specifications.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Web

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify the requirements for meta tags	1.1 Identify the scope and uses of material from the previous and current business, and the stakeholder requirements process 1.2 Determine the appropriate type and structure of meta tags, taking into account identified client needs, requirements and expectations 1.3 Identify and incorporate, new or contemporary client requirements, and expectations

ELEMENT	PERFORMANCE CRITERIA
2. Analyse the material	2.1 Use the analysis and the description tools, standards, precedents and techniques that are appropriate, given the nature of the material 2.2 Ensure that the analysis of the subject content of the material reflects expected client usage requirements 2.3 Clearly distinguish significant information from minor information 2.4 Ensure that the concepts derived from the analysis of the material are appropriate to the business requirements, and the intended use
3. Create meta tags	3.1 Develop meta tags using appropriate software 3.2 Ensure that meta tags represent the concepts appropriately, depending on the overall purpose, and intended use, of the material 3.3 Ensure that the meta tags conform to general conventions and to the business rules 3.4 Develop the reference structure of descriptors, where required, to display relationships to assist clients 3.5 Enhance the meta tags to meet identified client needs
4. Test and monitor meta tagging practices and procedures	4.1 Test meta tagging of material and make changes, if necessary 4.2 Regularly review meta tagging practices and procedures, to ensure that client needs are being met 4.3 Regularly review industry developments in meta tagging and take the appropriate action to improve practices 4.4 Check meta tags regularly for internal consistency and compliance with the established structure, rules and authorities

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1-2.4, 3.2, 3.5, 4.2-4.4	Reads and interprets plans, specifications, computer program data, and other documentation from a variety of sources, and consolidates information to determine

		requirements
Writing	3.1, 3.4, 3.5, 4.1, 4.3	- Prepares documentation expressing ideas, explores complex issues, and is constructed logically, succinctly and accurately - Writes and edits, computer code and technical data, ensuring the correct syntax and accuracy
Navigate the world of work	3.3, 4.2, 4.3, 4.4	Takes full responsibility for following policies, procedures, industry standards and legislative requirements, and identifies the organisational implications of new regulations
Get the work done	1.1-1.3, 2.1-2.4, 3.2-3.4, 4.1, 4.2	- Accepts responsibility for planning and sequencing complex tasks and workload, negotiating key aspects with others and taking into account capabilities, efficiencies and effectiveness - Monitors progress of plans and schedules, and reviews, and changes them to meet new demands and priorities - Applies systematic and analytical decision-making processes for complex and non-routine situations - Uses and investigates new digital technologies and applications, to manage and manipulate data, and to communicate effectively with others, in a secure and stable digital environment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTWEB510 Analyse information and assign meta tags	ICAWEB510A Analyse information and assign meta-tags	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTWEB510 Analyse information and assign meta tags

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- analyse and identify the meta tag requirements
- use software to create and test meta tags
- update meta tags in line with the client needs and/or industry developments.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the business conventions and rules for applying meta tags
- summarise the client business domain
- outline data modelling
- explain database management system (DBMS) fundamentals
- summarise the decision support systems
- summarise document indexing and search engines
- outline the functions and features of databases
- summarise metadata standards, including Dublin Core and simple hypertext markup language (HTML) ontology extensions
- describe how reference structure of descriptors can assist clients.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the website technologies field of work, and include access to:

- business and client information and materials
- the metadata software
- the project-related documentation.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

MSAENV272B Participate in environmentally sustainable work practices

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This competency covers the outcomes required to effectively measure current resource use and carry out improvements including those reducing negative environmental impacts of work practices. This unit is based on the sustainability guideline standard GCSSUS01A Participate in environmentally sustainable work practices.

Application of the Unit

Application of the unit	This competency applies to operators/team members who are required to follow procedures so as to work in an environmentally sustainable manner. This ensures regulatory compliance and also aims at minimising environmental risks and maximises the environmental performance of the process and the organisation. It includes: • Resources used • Potential environmental hazards • Improving environmental performance (within scope of competency and authority). This competency applies to all sectors of the manufacturing industry and members of its value chain. It may also be applied to all sections of an organisation, including office, warehouse etc. This unit will need to be appropriately contextualised as it is applied across an

	organisation and across different industry sectors.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	This unit has no prerequisites	

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify current resource use and environmental issues.	1.1. Identify workplace <i>environmental and resource efficiency issues</i> . 1.2. Identify resources used in own work role. 1.3. <i>Measure</i> and record current usage of resources using <i>appropriate techniques</i> .

ELEMENT	PERFORMANCE CRITERIA
	1.4. Identify and report workplace environmental hazards to appropriate personnel.
2. Comply with environmental regulations.	2.1. Follow procedures to ensure compliance . 2.2. Report environmental incidents to appropriate personnel.
3. Seek opportunities to improve environmental practices and resource efficiency.	3.1. Follow enterprise plans to improve environmental practices and resource efficiency. 3.2. Make suggestions for improvements to workplace practices in own work area.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include the ability to:

- report as required by procedures
- follow procedures and instructions and respond to change
- ask questions and seek clarifications relating to work requirements

Reading and writing is required in order to interpret required procedures and complete required workplace forms/reports.

Numeracy is required to interpret numeric workplace information, readings and measurements, handle data as required and complete numeric components of workplace forms/reports.

Required knowledge

Competency includes sufficient knowledge to:

- have a basic understanding of sustainability
- know the environmental hazards/risks, resource use and inefficiencies associated with own workplace (at an appropriate level)
- know the relevant environmental and resource efficiency systems and procedures for own work area
- know the impact of laws and regulations to a level relevant to the work context

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competence in this unit must be able to provide evidence of the ability to follow workplace procedures according to instructions given and to participate in the improvement of environmental and resource efficient work practices at own level of responsibility. Evidence must be strictly relevant to the particular workplace role.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

It is essential that competence is demonstrated in the knowledge and skills defined in this unit. These may include the ability to:

- identify and measure resources used in their job
- identify situations likely to lead to an environmental incident
- follow procedures related to environmental performance.

Consistent performance should be demonstrated. For example, look to see that:

- work is routinely to procedures
- the minimum of resources is used consistent with the job requirements, good practice and the procedures.

Context of and specific resources for assessment

Assessors must be satisfied that the person can consistently perform the unit as a whole, as defined by the Elements, Performance Criteria and skills and knowledge.

Depending on the selected methods of assessment access may be required to:

- workplace procedures and plans
- documentation in relation to production, waste, overheads, hazard control/management
- reports from supervisors/managers
- case study/scenarios

Method of assessment

A holistic approach should be taken to the assessment. Competence in this unit may be assessed:

- by demonstration in the workplace

EVIDENCE GUIDE	
	• using targeted questioning for appropriate portions • by use of a suitable simulation and/or a range of case studies/scenarios • by a combination of these techniques. In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.
Guidance information for assessment	Assessors need to be aware of any cultural issues that may affect responses to questions. Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the assessee and the work being performed.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Procedures	All operations are performed in accordance with procedures including all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.
Environmental and resource efficiency issues	Environmental and resource efficiency issues include minimisation of environmental risks and maximisation of opportunities to improve business environmental performance and to promote more efficient production and consumption of natural resources, for example by: • minimisation of waste, through implementation of the waste management hierarchy

RANGE STATEMENT	
	• efficient and effective use of energy and other resources • seeking alternative sources of energy • efficient use of materials and appropriate disposal of waste • use of controls to minimise the risk of environmental damage from hazardous substances • efficient water use • reducing emissions • life cycle analysis applied to issues such as energy supply, materials, transport, production
Measure	Measure should be interpreted in a manner consistent with the scope of the job and may include things like: • counting the number of items entering/leaving a work area • reading indicators in the work area • obtaining relevant information from support personnel • other simple means
Appropriate techniques	Appropriate techniques include: • material fed to/consumed by plant/equipment • plant meters and gauges • job cards including kanbans • examination of invoices from suppliers • measurements made under different conditions • examination of relevant information and data.
Compliance	Compliance includes meeting relevant federal, state and local government laws, by-laws, regulations and mandated codes of practice. It also includes any codes and standards that the enterprise applies voluntarily.
Incidents	Incidents include: • breaches or potential breaches of regulations • occurrences outside of standard procedure which may lead to lower environmental performance.
Enterprise plans	Enterprise plans include:

RANGE STATEMENT	
	• documented policies and procedures • work plans to minimise waste, increase efficiency of water/energy use, minimise environmental hazards
Suggestions	Suggestions include ideas that help to: • prevent and minimise environmental risks and maximise opportunities • reduce emissions of greenhouse gases • reduce use of non-renewable resources • improve energy efficiency • increase use of renewable, recyclable, reusable and recoverable resources • reduce waste • increasing the reusability/recyclability of wastes/products • reduce water usage and/or water wastage.

Unit Sector(s)

Unit sector	

Competency field

Competency field	Competitive manufacturing tools

Co-requisite units

Co-requisite units		

MSAENV472B Implement and monitor environmentally sustainable work practices

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This competency covers the outcomes required to effectively analyse the workplace in relation to environmentally sustainable work practices and to implement improvements and monitor their effectiveness. This unit is based on the sustainability guideline standard GCSSUS02A Implement and monitor environmentally sustainable work practices.

Application of the Unit

Application of the unit	This competency applies to those who have responsibility for a specific area of work or who lead a work group or team. It addresses the knowledge, processes and techniques necessary to implement and monitor environmentally sustainable work practices, including the development of processes and tools. It includes: • Identifying areas for improvement • Developing plans to make improvements • Implementing and monitoring improvements in environmental performance. This competency applies to all sectors of the manufacturing industry and members of its value chain. It may also be applied to all sections of an organisation, including office, warehouse etc. This unit will need to be appropriately contextualised as it is applied across an organisation and across different industry sectors.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	This unit has no prerequisites	

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Investigate current practices in relation to resource usage.	1.1 Identify environmental regulations applying to the enterprise. 1.2 Assess procedures for assessing <i>compliance</i> with environmental regulations. 1.3 Collect information on environmental and resource efficiency systems and procedures, and provide to the work group where appropriate. 1.4 Measure and record current resource usage by members of the work group.

ELEMENT	PERFORMANCE CRITERIA
	1.5 Analyse and record current purchasing strategies. 1.6 Analyse current work processes to access information and data and assist in identifying areas for improvement.
2. Set targets for improvements.	2.1 Seek input from stakeholders, key personnel and specialists. 2.2 Access external sources of information and data as required. 2.3 Evaluate alternative solutions to workplace environmental issues. 2.4 Set efficiency targets.
3. Implement performance improvement strategies.	3.1 Source techniques/tools to assist in achieving targets. 3.2 Apply continuous improvement strategies to own work area of responsibility and communicate ideas and possible solutions to the work group and management. 3.3 Integrate environmental and resource efficiency improvement plans for own work group with other operational activities and implement them. 3.4 Seek suggestions and ideas about environmental and resource efficiency management from stakeholders and act upon them where appropriate. 3.5 Implement costing strategies to fully value environmental assets.
4. Monitor performance.	4.1 Document outcomes and communicate reports on targets to key personnel and stakeholders. 4.2 Evaluate strategies. 4.3 Set new targets and investigate and apply new tools and strategies. 4.4 Promote successful strategies and reward participants where possible.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

REQUIRED SKILLS AND KNOWLEDGE

- using relevant environmental and resource efficiency systems, tools and procedures
- applying quality assurance systems relevant to own work area
- applying relevant supply chain procedures
- measurement and calculation techniques
- communication/consultation skills to ensure information is supplied to the work group

Reading and writing is required to comprehend documentation and interpret environmental and energy efficiency requirements and to document and maintain records

Numeracy is required to interpret numeric workplace information, readings and measurements, handle data as required and complete numeric components of workplace forms/reports.

Required knowledge

Required knowledge includes:

- how to access and use relevant environmental and resource efficiency systems, tools and procedures
- understanding of best practice approaches relevant to own area of responsibility
- strategies to maximise opportunities and minimise impacts relevant to own work area
- relevant environmental and resource efficiency issues specific to industry practices
- methods for measuring and calculating resource usage

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competence in this unit must be able to provide evidence of the ability to implement and monitor integrated environmental and resource efficiency management policies and procedures within an organisation.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

It is essential that competence is demonstrated in the knowledge and skills defined in this unit. These may include the ability to:

EVIDENCE GUIDE	
	• monitor and investigate current resource usage • develop plans to improve sustainability • implement environmental improvements. Consistent performance should be demonstrated. For example, look to see that: • environmental performance is routinely monitored and investigated • areas for improvements are followed through and the implemented changes are in turn monitored and investigated.
Context of and specific resources for assessment	This section should be read in conjunction with the range of variables for this unit of competency. Assessors must be satisfied that the person can consistently perform the unit as a whole, as defined by the Elements, Performance Criteria and skills and knowledge. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required. Access must be provided to appropriate learning and/or assessment support when required. Where applicable, physical resources should include equipment modified for people with disabilities.
Method of assessment	A holistic approach should be taken to the assessment. Competence in this unit may be assessed: • by demonstration in the workplace • using targeted questioning for appropriate portions • through use of specific project(s) • by use of a suitable simulation and/or a range of case studies/scenarios • by a combination of these techniques. In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or

EVIDENCE GUIDE	
	similar assessment.
Guidance information for assessment	Assessors need to be aware of any cultural issues that may affect responses to questions. Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the assessee and the work being performed.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Procedures	All operations are performed in accordance with procedures. Procedures include all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards. Where reference is made to industry codes of practice, and/or Australian/international standards, the latest version must be used.
Environmental and resource efficiency issues	Environmental and resource efficiency issues include: • addressing environmental and resource sustainability initiatives such as Environmental Management Systems, action plans, surveys and audits • reference to standards, guidelines and approaches such as: • ISO 14001 Environmental Management Systems • Life Cycle Analyses

RANGE STATEMENT	
	• Cradle to cradle • Global Reporting Initiative • Ecological footprinting • Triple Bottom Line reporting • Product Stewardship • determining enterprise's most appropriate waste treatment including waste to landfill, recycling, re-use and wastewater treatment • applying the waste management hierarchy in the workplace • initiating and/or maintaining appropriate enterprise procedures for operational energy consumption, including stationary energy and non stationary (transport) • efficient use of water • minimising greenhouse gas emissions • use of controls to minimise the risk of environmental damage from hazardous substances
Measure	Measuring techniques include: • material fed to/consumed by plant/equipment • plant meters and gauges • job cards including kanbans • examination of invoices from suppliers • measurements made under different conditions • examination of relevant information and data • others as appropriate to the specific industry contexts.
Techniques and tools	Techniques and tools may includeÂ : • visual workplace concepts • measurement, display and/or recording devices • changed work practices/procedures • competence development and awareness training • process and equipment items
Compliance	Compliance includes meeting relevant federal, state and local government laws, by-laws, regulations and codes of practice.
Incidents	Incidents include:

RANGE STATEMENT	
	• breaches or potential breaches of regulations • occurrences outside of standard procedure which may lead to lower environmental performance
Purchasing strategies	Purchasing strategies include: • influencing suppliers to take up environmental sustainability • selecting materials/components with a lower environmental profile.
Stakeholders, key personnel and specialists	Stakeholders, key personnel and specialists include individuals and groups both inside and outside the organisation that have some direct interest in the enterprise's conduct, actions, products and services, including: • employees at all levels of the organisation • customers • suppliers • other organisations • key personnel within the organisation, and specialists outside it who may have particular technical expertise
Suggestions	Suggestions includes ideas that help to: • prevent and minimise environmental risks and maximise opportunities • reduce emissions of greenhouse gases • reduce use of non-renewable resources • make more efficient use of energy, water and other resources • maximise opportunities to re use and recycle materials • identify strategies to offset or mitigate environmental impacts. e.g. purchasing of carbon credits • express purchasing power through the selection of suppliers with improved environmental performance. e.g. purchasing renewable energy and materials with lower embedded carbon • eliminate the use of hazardous and toxic materials increasing the reusability/recyclability of wastes/products.

Unit Sector(s)

Unit sector	

Competency field

Competency field	Competitive manufacturing tools

Co-requisite units

Co-requisite units		

MSAPMSUP390A Use structured problem solving tools

Modification History

Not applicable.

Unit Descriptor

Unit descriptor

This competency covers the solving of process and other problems, beyond those associated directly with the process unit/equipment, using structured process improvement tools to identify improvements and/or solve problems.

Application of the Unit

Application of this unit

The competency is typically performed by an experienced operator, team leader or supervisor.

Generally the person would be part of a team during the solving of complex or systemic problems and would be expected to perform all parts of this unit and at all times would be liaising and cooperating with other members of the team. This includes:

- using a range of formal problem solving techniques
- identifying and clarifying the nature of the problem
- devising the best solution
- evaluating the solution
- developing an implementation plan to rectify the problem.

This unit does not cover the solving of problems undertaken as part of the operator's normal role which is covered in the relevant operation competency unit.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisites

This unit has **no** prerequisites.

Employability Skills Information

Employability Skills

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes of a unit of competency	Performance Criteria describe the required performance needed to demonstrate achievement of the Element. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
ELEMENT	Performance Criteria describe the required performance needed to demonstrate achievement of the Element. Assessment of performance is to be consistent with the Evidence Guide.
1. Identify the problem.	1.1 Identify variances from normal operating parameters and product quality. 1.2 Define the extent, cause and nature of the problem by observation and investigation. 1.3 State and specify the problem clearly.
2. Determine fundamental cause of problem.	2.1 Identify possible causes based on experience and the use of problem solving tools/analytical techniques. 2.2 Develop possible cause statements. 2.3 Identify fundamental cause.
3. Determine corrective action.	3.1 Consider all possible options for resolution of the problem. 3.2 Consider strengths and weaknesses of possible options. 3.3 Determine corrective action to remove the problem and possible future causes. 3.4 Develop implementation plans identifying measurable objectives, resource needs and timelines in accordance with safety and operating procedures. 3.5 Develop recommendations for ongoing monitoring

ELEMENT	PERFORMANCE CRITERIA
ELEMENT	Performance Criteria describe the required performance needed to demonstrate achievement of the Element. Assessment of performance is to be consistent with the Evidence Guide.
	and testing.
4. Communicate recommendations.	4.1 Prepare report on recommendations. 4.2 Present recommendations to appropriate personnel. 4.3 Follow up recommendations if required.

Required Skills and Knowledge

This describes the essential skills and knowledge and their level required for this unit.

Competence includes a thorough knowledge and understanding of the process, normal operating parameters, and product quality to recognise non-standard situations.

This unit of competency includes use of analytical techniques in problem solving such as:

- brainstorming
- fishbone diagrams/cause and effect diagrams
- process logic/process requirements
- logic tree
- similarity/difference analysis
- Pareto analysis
- force field/SWOT analysis
- flow charts
- control charts, runcharts and graphs
- scattergrams.

Action plans to solve problems are prepared including:

- priority requirements
- measurable objectives
- resource requirements
- methods for reaching objectives
- timelines
- coordination and feedback requirements
- safety requirements
- risk assessment
- environmental requirements.

Language, literacy and numeracy requirements

This unit requires the ability to read and interpret typical product specifications, job sheets and material labels as provided to operators.

Writing is required to the level of report writing and completing workplace forms.

Basic numeracy is also required, eg to interpret quality data and graphs.

Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, required skills and knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

Overview of assessment

A holistic approach should be taken to the assessment.

Assessors must be satisfied that the person can consistently perform the unit as a whole, as defined by the Elements, Performance Criteria and skills and knowledge.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

It is essential that competence is demonstrated in the knowledge and skills defined in this unit. These may include the ability to apply and explain:

- relevant equipment and operational processes
- enterprise policies and procedures
- enterprise goals, targets and measures
- enterprise quality, OHS and environmental requirements
- principles of decision-making strategies and techniques
- enterprise information systems and data collation
- industry codes and standards.

Consistent performance should be demonstrated. For example, look to see that:

- problems are recognised and clarified
- possible causes are identified, based on experience and use of analytical techniques in solving the problem, including:
 - identifying variations
 - identifying cause and effect
 - separating single problems from multiple problems
 - recognising recurring problems.
- fundamental cause of process or equipment faults is determined
- corrective/preventative implementation plans are developed to avoid recurrence of the problem
- implementation plan is presented to relevant personnel.

Assessment method and context

Assessment will occur on the job or in a simulated workplace.

Competence in this unit may be assessed:

- in a situation allowing the generation of evidence of the ability to recognise and respond to problems
- by using a suitable simulation and/or a range of case studies/scenarios
- through a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment. Assessors need to be aware of any cultural issues that may affect responses to questions.

Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the assessee and the work being performed.

Specific resources for assessment

This section should be read in conjunction with the Range Statement for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

Access must be provided to appropriate learning and/or assessment support when required. Where applicable, physical resources should include equipment modified for people with disabilities.

Range Statement

RANGE STATEMENT

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Where reference is made to industry codes of practice, and/or Australian/international standards, the latest version must be used.

Context

The competency unit applies to a wide range of processes and equipment. The process manufacturing technical units of competency include a problem solving element where problems specific to that competency unit are to be resolved. This competency unit is where structured problem solving techniques are to be applied more broadly, or with greater depth/rigour than is implied by the problem solving element of the technical units.

In large plants or manufacturing organisations with multiple processes, it may apply to more than one process if those processes interact with each other. It applies to all operators across all functions.

Procedures

All operations are performed in accordance with procedures.

Procedures include all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

Hazards

Typical hazards include leaks, spillages and equipment hazards that can occur during the walk-through of a plant.

Problems

'Anticipate and solve problems' means resolve a wide range of routine and non-routine problems, using product and process knowledge to develop solutions to problems which do not have a known solution/a solution recorded in the procedures.

Typical process and product problems may include:

- non- routine process and quality problems
- equipment selection, availability and failure
- teamwork and work allocation problems
- safety and emergency situations and incidents.
-

Unit Sector(s)

Not applicable.

MSL933001A Maintain the laboratory/field workplace fit for purpose

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the general cleaning of work surfaces, cleaning and storage of equipment and the monitoring of laboratory stocks under direct supervision.

Application of the Unit

Application of the unit	This unit of competency is applicable to laboratory assistants and instrument operators working in all industry sectors. This unit of competency forms a major part of the work of laboratory assistants. They work in accordance with work instructions and standard operating procedures which incorporate all relevant aspects of occupational health and safety (OHS) legislation and the codes, guidelines, regulations and Australian standards applying to environmental hazards and dangerous goods. Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Clean work preparation areas	1.1.Clean preparation areas using appropriate cleaning agents and equipment according to enterprise procedures 1.2.Remove spillages, if they occur, using appropriate agents, personal protective equipment and enterprise procedures 1.3.Collect and segregate wastes in accordance with enterprise procedures, relevant codes and regulations
2. Clean and store equipment	2.1.Collect used equipment, inspect for faults and, where necessary, remove from service 2.2.Use appropriate agents, apparatus and techniques to clean equipment 2.3.Store clean equipment in the designated locations and manner

ELEMENT	PERFORMANCE CRITERIA
3. Monitor stocks of materials and equipment	3.1. Perform stock checks and maintain records of usage as directed 3.2. Store labelled stocks for safe and efficient retrieval 3.3. Inform appropriate personnel of impending stock shortages to maintain continuity of supply
4. Maintain a safe work environment	4.1. Use established safe work practices and personal protective equipment to ensure personal safety and that of other personnel 4.2. Report potential hazards and/or maintenance issues in own work area to designated personnel 4.3. Minimise the generation of wastes and environmental impacts 4.4. Dispose of wastes in accordance with enterprise procedures, relevant codes and regulations

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- safely cleaning work preparation areas and equipment using appropriate cleaning agents, equipment and techniques
- safely removing spillages and disposing of wastes
- minimising the exposure to hazards of self, others and the laboratory
- safely storing equipment and materials using enterprise procedures, relevant codes and guidelines
- monitoring and reporting stock levels and the condition of laboratory materials and equipment
- keeping accurate, up-to-date records
- reporting potential hazards and maintenance issues using enterprise procedures

Required knowledge

Required knowledge includes:

- enterprise procedures for the cleaning of work preparation areas, materials and equipment

REQUIRED SKILLS AND KNOWLEDGE

- storage requirements for specific materials and equipment
- enterprise procedures for minimisation and disposal of waste
- enterprise procedures for monitoring of laboratory stocks
- information contained in material safety data sheets (MSDS) for materials handled regularly during the performance of maintenance tasks
- relevant health, safety and environment requirements

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment**Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Assessors should ensure that candidates can:

- follow enterprise procedures, relevant codes and guidelines when maintaining the laboratory/field workplace
- work safely and minimise exposure of hazards to self, others and the laboratory
- keep accurate up-to-date records and report potential hazards and maintenance issues.

Context of and specific resources for assessment

This unit of competency is to be assessed in the workplace or simulated workplace environment.

This unit of competency may be assessed with:

- *MSL943002A Participate in laboratory/field workplace safety.*

Resources may include:

- access to work preparation areas, stocks, materials and equipment
- cleaning, decontamination and/or disinfection agents and equipment
- personal protective equipment
- stock order forms, labels and records/forms.

Method of assessment

The following assessment methods are suggested:

- observation of the candidate's techniques for cleaning

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	and/or removal of spillages and waste disposal • review of stock records completed by the candidate • feedback from supervisors and peers • questioning to assess underpinning knowledge of regulations and procedures where direct observation is difficult (such as dealing with hazards) and choice of materials and equipment. In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability. Access must be provided to appropriate learning and/or assessment support when required. The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.
This competency in practice	Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and show its relevance in a workplace setting. Manufacturing On receipt of a bulk container of cleaning or sanitising agent, a laboratory assistant always attached to the container a description of its method of use. The assistant also attached a list of the surfaces, apparatus, utensils and machines that could be safely treated with that chemical agent as outlined in the company's quality manual. This practice reduced the likelihood of misuse of the chemical, wastage, damage to equipment and inadequate cleaning and sanitation. Biomedical and environmental Laboratory assistants and technical officers routinely examine fluids for micro-organisms using a microscope. They examine fluids, such as urine, seawater, chlorinated pool water, water from catchment areas and bottled water. To maintain microscopes in working order, they

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	thoroughly clean the stage, oculars and each objective after use and sometimes between samples. The 100X objective requires particular care since this is the oil immersion objective. The oil is slightly acidic and will slowly corrode the objective if it is not cleaned thoroughly and regularly. After using the 100X objective they also take care not to drag the other objectives through the oil. Food processing A laboratory assistant regularly uses standard pH solutions to calibrate the laboratory's pH meters. The assistant is aware from the label that the shelf life of these solutions after opening is two months and records the opening and disposal dates on the container. The assistant is also aware that the shelf life of unopened buffer solutions is twelve months from the date of manufacture and monitors this by noting the production date on the bottle. Requests for stock replacement take into account the normal rate of use of these buffer solutions so that unopened bottles have not reached their expiry date before use.

Range Statement**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Codes of practice	Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used
Standards, codes, procedures and/or enterprise requirements	Standards, codes, procedures and/or enterprise requirements may include: • Australian and international standards such as: • AS 1678 Emergency procedure guide - Transport

RANGE STATEMENT

- AS 1940-2004 Storage and handling of flammable and combustible liquids
- AS 2252 Biological safety cabinets
- AS 3780-2008 The storage and handling of corrosive substances
- AS 4332-2004 The storage and handling of gases in cylinders
- AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories
- AS/NZS 1269 Set:2005 Occupational noise management set
- AS/NZS 1337 Eye protection
- AS/NZS 2161 Set:2008 Occupational protective gloves set
- AS/NZS 2210:1994 Occupational protective footwear
- AS/NZS 2243 Set:2006 Safety in laboratories set
 - AS/NZS 2243.8:2006 Safety in laboratories - Fume cupboards
 - AS/NZS 2865 Set:2005 Safe working in a confined space set
 - AS/NZS 2982.1:1997 Laboratory design and construction - General requirements
 - AS/NZS 4187:2003 Cleaning, disinfecting and sterilising reusable medical and surgical instruments and equipment, and maintenance of associated environments in health care facilities
 - AS/NZS 4452:1997 The storage and handling of toxic substances
- AS/NZS 4501 Set:2008 Occupational clothing set
 - AS/NZS ISO 14000 Set:2005 Environmental management standards set
- animal welfare legislation and codes of practice
- Australian code of good manufacturing practice for medicinal products (GMP)
- Australian Dangerous Goods Code
- Australian Quarantine and Inspection Service (AQIS) Export Control (Orders) Regulations

RANGE STATEMENT	
	1982 • Australian Quarantine and Inspection Service (AQIS) Import Guidelines • Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) Codes of Practice • enterprise or standard operating procedures (SOPs) • equipment manuals and warranties, supplier catalogues and handbooks • gene technology regulations • guide to physical containment levels and facility types • HB 9-1994 Occupational personal protection • material safety data sheets (MSDS) • National Code of Practice for the labelling of workplace substances (NOHSC:2012 (1994)) • national environment protection measures • National Health and Medical Research Council (NHMRC) Guidelines • national measurement regulations and guidelines • occupational health and safety (OHS) national standards and codes of practice • principles of good laboratory practice (GLP) • Therapeutic Goods Regulations 1009
Equipment, material procedures and facilities	Equipment, material procedures and facilities may include: • animal cages • autoclaves • balances • blenders, centrifuges and separating equipment • brushes • cell counters and staining machines • colorimeters/spectrometers and polarimeters • compaction rammers and soil classification equipment • conductivity meters and pH meters • dishwashers, refrigerators, freezers, ovens, microwave ovens, incubators and water baths • disintegration apparatus, thermometers and incubators

RANGE STATEMENT	
	• fume hoods, biohazard containers and biological safety cabinets • gas cylinders • glassware, plastic ware; glass, plastic and quartz cuvettes • hotplates, mantles, burners and muffle furnaces • instrument chart recorders, penetrometers, force measuring equipment and tensiometers • light and fluorescence microscopes • melting point apparatus, viscometers and hardness testing equipment • microtomes and tissue processors • mixing and separating equipment such as centrifuges, riffers and splitters and mixers • noise meters and blasting meters • optical microscopes • pipettes, burettes and volumetric glassware • shovels, scoops, plates, rods, cylinder moulds and buckets • steel ruler/tapes and spirit levels • thermometers, thermohygrographs, instrument chart recorders, hydrometers, pH meters and ion-selective electrodes • ultrasonic cleaners • vehicles
Typical materials	Typical materials may include: • consumable items, such as syringes, pipette tips, weigh boats • disposable clothing and personal protective equipment • distilled water, reagents, chemicals, disinfectants, detergents, agar media and plates • equipment spares, such as fuses, bulbs and batteries • oils/lubricants, fuels, industrial gases and cryogenics, such as dry ice and liquid nitrogen • paper and stationery • reference samples and standards
Maintenance	Maintenance may include: • checking serviceability before storage • cleaning

RANGE STATEMENT	
	• prevention of contamination • storing
Cleaning requirements	Cleaning requirements may include: • decontamination and/or disinfection • hygiene monitoring • minimising environmental impacts • operation of automatic cleaning apparatus, such as pipette washer, ultrasonic cleaners and dishwashers • sterilisation and disposal of wastes using boiling, high pressure air or steam, microwaves, chemicals, gas, filtration, ultraviolet radiation and autoclaving • use of specialised techniques, such as chromic acid baths and soaking in hypochlorite
Preparation areas	Preparation areas may include: • benches • fume cupboards • sheds • sinks
Agents for cleaning	Agents for cleaning may include: • cleaning solutions • decontaminants • organic solvents
Spillages	Spillages may include: • chemicals • radioactive materials • biologically active materials
Wastes	Wastes may include: • broken glass • batteries • disposable personal protective equipment • excess test samples • micro-organisms • plastic and metals • sharps • solvents • spent reagents

RANGE STATEMENT	
	- spent samples and test pieces - used containers, boxes, bags and palettes
Stock records	Stock records may include: - calibration and maintenance history - data sheets - handbooks, warranty documents, catalogues, manuals and MSDS - records of usage, loans and breakages
Communication	Communication could involve other people, such as: - laboratory, production, administration and cleaning staff - internal/external contractors - emergency personnel
Maintenance issues	Maintenance issues could involve: - checking materials and equipment are fit for purpose - equipment malfunction - hygiene issues - potential hazards, incidents and emergencies - recycling and waste disposal - spillages, leakages, breakages and contamination - stock requirements and shortages
Hazards	Hazards may include: - aerosols from broken centrifuge tubes and pipetting - chemicals, such as acids, heavy metals, pesticides and hydrocarbons - crushing, entanglement and cuts associated with moving machinery or falling objects - cryogenics, such as dry ice and liquid nitrogen - electric shock - fluids under pressure, such as steam and industrial gas cylinders - manual handling, working at heights and working in confined spaces - microbiological organisms and agents associated with soil, air, water, blood and blood

RANGE STATEMENT	
	products, and human or animal tissue and fluids • occupational overuse syndrome, slips, trips and falls • pedestrian and vehicular traffic • sharps, broken glassware and hand tools • solar radiation, dust and noise • sources of ignition, flammable liquids and gases
Established safe work practices	Established safe work practices may include: • applying containment procedures through the use of appropriate equipment, such as biohazard containers, laminar flow cabinets, Class I, II and III biohazard cabinets and Class PCII, PCIII, and PCIV physical containment facilities • ensuring access to service shut-off points • following established manual handling procedures for tasks involving manual handling • handling and storage of all hazardous materials and equipment in accordance with labelling, MSDS and manufacturer's instructions • identifying and reporting operating problems or equipment malfunctions • labelling of samples, reagents, aliquoted samples and hazardous materials • recognising and observing hazard warnings and safety signs • reporting to appropriate personnel of abnormal emissions, discharges and airborne contaminants, such as noise, light, solids, liquids, water/waste water, gases, smoke, vapour, fumes, odour and particulates • use of MSDS • use of personal protective equipment, such as hard hats, hearing protection, gloves, safety glasses, goggles, face guards, coveralls, gown, body suits, respirators and safety boots
Occupational health and safety (OHS) and environmental management requirements	OHS and environmental management requirements: • all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through

RANGE STATEMENT

	state/territory or federal legislation - these requirements must not be compromised at any time • all operations assume the potentially hazardous nature of samples and require standard precautions to be applied • where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health

Unit Sector(s)

Unit sector	Maintenance

Competency field

Competency field	

Co-requisite units

Co-requisite units		

MSL954001A Obtain representative samples in accordance with sampling plan

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the ability to obtain a range of samples that are representative of the source material (e.g. raw ingredients, product in process and final product) and to prepare the samples for testing. All sampling activities are conducted in accordance with a defined sampling plan. This unit does not cover the subsequent testing of the samples.

Application of the Unit

Application of the unit	This unit of competency is applicable to laboratory technicians in all industry sectors. It involves: • a range of sampling plans, samples and sampling procedures, which apply to the enterprise site, plant laboratory or field sites • enterprise products/materials and hazardous materials • a range of sampling points and/locations. Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for sampling	1.1. Confirm the sampling location, number and type of samples, and timing and frequency of sampling from enterprise or client's sampling plan 1.2. Liaise with relevant personnel to arrange site access and, if appropriate, all necessary clearances and/or permits 1.3. Select sampling equipment and conditions to achieve representative samples and preserve sample integrity during collection, storage and transit 1.4. Check that all procedures are in accordance with client or enterprise requirements, relevant standards and codes 1.5. Identify site and sampling hazards and review enterprise safety procedures

ELEMENT	PERFORMANCE CRITERIA
	1.6. Assemble and check all sampling equipment, materials, containers and safety equipment 1.7. Arrange suitable transport to, from and around site as required
2. Conduct sampling and log samples	2.1. Locate sampling sites and, if required, services at the site 2.2. Conduct representative sampling in accordance with sampling plan and defined procedures 2.3. Record all information and label samples in accordance with traceability requirements 2.4. Record environment or production conditions and any atypical observations made during sampling that may impact on sample representativeness or integrity 2.5. Transport all samples back to base according to standard operating procedures (SOPs) and relevant codes
3. Prepare samples for testing	3.1. Prepare sub-samples and back-up sub-samples that are representative of the source 3.2. Label all sub-samples to ensure traceability and store in accordance with SOPs 3.3. Follow defined preparation and safety procedures to limit hazard or contamination to samples, self, work area and environment 3.4. Distribute sub-samples to defined work stations maintaining sample integrity and traceability requirements
4. Address client issues	4.1. Enter approved information into laboratory information management system (LIMS) 4.2. Report all relevant aspects of the sampling and preparation phases in accordance with enterprise procedures 4.3. Ensure that information provided to client is accurate, relevant and authorised for release 4.4. Maintain security and confidentiality of all client/enterprise data and information
5. Maintain a safe work environment	5.1. Clean all equipment, containers, work area and vehicles according to enterprise procedures 5.2. Check serviceability of all equipment before storage 5.3. Use defined safe work practices and personal protective equipment to ensure personal safety and that of other laboratory personnel

ELEMENT	PERFORMANCE CRITERIA
	5.4.Minimise the generation of wastes and environment impacts 5.5.Ensure the safe collection of all hazardous wastes for appropriate disposal

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- collecting representative samples in accordance with a sampling plan
- techniques to preserve the integrity of samples
- identifying atypical materials and samples and taking appropriate action
- maintaining sampling equipment
- completing sampling records
- working safely
- following requirements for the disposal of waste and the preservation of the environment

Required knowledge

Required knowledge includes:

- principles of representative samples
- principles and procedures for random, systematic and stratified sampling, consistency of sampling procedures
- preservation of the integrity of samples
- maintaining identification of samples relative to their source
- enterprise and/or legal traceability requirements
- cost effectiveness of sampling
- characteristics of product/material to be sampled and likely contaminants
- links between quality control, quality assurance, quality management systems and sampling procedures
- enterprise procedures dealing with legislative requirements for the handling, labelling and transport of hazardous goods
- links between correct occupational health and safety (OHS) procedures and personal and environmental safety particularly at high risk sites

REQUIRED SKILLS AND KNOWLEDGE

Specific industry

Additional knowledge requirements may apply for different industry sectors. For example: Biomedical and environmental services:

- specific legislation on biohazards
- documentation procedures for the chain of custody for samples to be used as evidence or for blood transfusion

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors should ensure that candidates can:

- collect the specified quantity of sample to enable all processing and testing to occur and back-up samples to be stored
- obtain a sample that is representative of the bulk material
- preserve the integrity of samples by closely adhering to procedures
- label samples and sub-samples to satisfy enterprise/legal traceability requirements
- identify atypical materials and samples and take appropriate action
- maintain sampling equipment in appropriate condition
- complete sampling records using enterprise procedures
- follow safety regulations and enterprise OHS procedures during sampling, transport and storage
- follow relevant legislative requirements for the disposal of waste and the preservation of the environment.

Context of and specific resources for assessment

This unit of competency is to be assessed in the workplace or simulated workplace environment.

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	This unit of competency may be assessed with: • <i>MSL924001A Process and interpret data</i> • <i>MSL943002A Participate in laboratory/field workplace safety</i> • <i>relevant MSAL974000 series units of competency</i> • <i>relevant MSAL975000 series units of competency relevant to the sampling.</i> Resources may include: • variety of sample types • sampling plans • a selection of sampling containers and sampling equipment.
Method of assessment	The following assessment methods are suggested: • inspection of samples collected by the candidate • review of sampling documentation completed by the candidate • feedback from peers, customers and supervisors that sampling plans were followed • questioning to assess underpinning knowledge of representative sampling procedures • observation of the candidate taking a range of samples. In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability. Access must be provided to appropriate learning and/or assessment support when required. The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.
This competency in practice	Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and to show its relevance in a workplace

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setting.

Manufacturing

A metallurgical laboratory technician is very familiar with preparing representative samples for a range of final products in a steelmaking plant. One day, he/she is asked to sample a 50 tonne small-particle coal delivery which is believed to have a higher than acceptable sulphur content. Having never prepared representative samples for such a large quantity of material, the technician consulted their supervisor and developed an appropriate sampling plan. The technician arranged for the operator of a small front-end loader to take buckets of coal from five equally spaced points around the pile. The resulting material was then combined and mixed in one heap. The technician coned and quartered the heap enough times to obtain a representative sample of about 5kg. He/she arranged for the unwanted material to be returned to the stockpile. On return to the laboratory, the technician crushed the sample and repeatedly coned and quartered the material to obtain an analytical portion.

Environmental

A field technician trained in sampling natural water systems is asked to sample a bright yellow industrial wastewater discharge into a small creek. The relevant sampling plan specifies that the samples should be collected where the waste water is well mixed near the centre of the creek and at the mid-depth point. The technician also notes that the samples must be collected where turbulence is at a maximum so that the settling of solids is minimal. On arrival at the site, the technician locates where the wastewater is entering the creek. He/she moves downstream to where the waste water and creek water is well mixed and there is little apparent loss of the yellow suspended solids. The technician dons the required personal protective equipment and uses a convenient bridge to collect a set of six samples and duplicates over a half-hour period using the equipment and procedures specified in the sampling plan. Using a field notebook, the technician records all information specified in the laboratory's chain of custody requirements and safety plan for handling potentially hazardous industrial waste.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Codes of practice

Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used

Standards, codes, procedures and/or enterprise requirements

Standards, codes, procedures and/or enterprise requirements may include:

- Australian and international standards, such as:
 - AS 1199 Sampling procedures and tables for inspection by attributes
 - AS 1678 Emergency procedure guide -Transport
 - AS 1940-2004 Storage and handling of flammable and combustible liquids
 - AS 3780-2008 The storage and handling of corrosive substances
 - AS 4433.2-1997 Guide to the sampling of particulate materials - Preparation of samples
 - AS/NZS 4452:1997 The storage and handling of toxic substances
- American Association of Cereal Chemists (AACC) Approved Methods of Analysis
- Australian Dangerous Goods Code
- enterprise and/or client sampling schemes and sampling plans
- enterprise recording and reporting procedures
- gene technology regulations
- material safety data sheets (MSDS)
- methods and procedures which may be written to meet enterprise, client and/or regulatory/certifying body requirements
- National Code of Practice for the labelling of workplace substances [NOHSC:2012 (1994)]
- site plans, maps and specifications

RANGE STATEMENT	
Basic principles of sampling	Basic principles of sampling include: • representative samples • preservation of integrity of samples • maintaining identification of samples relative to their source, enterprise and legal traceability • cost-effectiveness of sampling • consistency of sampling procedures • sampling principles, including random, systematic and stratified sampling
Materials sampled	Materials sampled may include: • gas or air samples • liquid samples, such as water, groundwater, waste water, stormwater, sludges and sewage • solid samples, such as soil, sediments, rocks, concrete, quarry and mining material • solid wastes • raw materials, start, middle, end of production run samples, final products and materials used in production processes, such as flocculants • plants • animals • microbiological samples
Types of samples	Types of samples may include: • grab samples • composite samples • quality control samples • research or one-off samples • environmental or survey samples
Sampling tools and equipment	Sampling tools and equipment may include: • shovels, augers and chain saws • sampling frames, sampling tubes, dip tubes, spears, flexible bladders and syringes • front-end loader, backhoe, excavator and drill rig • sample bottles or containers, plastic containers and disposable buckets • access valves • sample thief • auto samplers

RANGE STATEMENT	
	• pumps and stainless steel bailers • traps and cages • sterile containers, pipettes, inoculating loops and disposable spoons
Maintenance of integrity of samples	Maintenance of integrity of samples may include: • use of compatible container, such as glass, plastic, amber and opaque bottles • use of appropriate preservatives, such as sodium azide, toluene or antibiotics • decontamination of sampling tools between collection of consecutive samples • wrapping container in foil • purging of sample lines and boxes • handling and transport to avoid disturbance or damage • temperature control which may involve insulation of sample without direct contact with the coolant • wrapping in wet newspaper, cloth, sand or sawdust • transfer of sterile sample into sterile container • monitoring of storage conditions
Site and sampling hazards	Site and sampling hazards may include: • solar radiation, dust and noise • wildlife, such as snakes, spiders and domestic animals • biohazards, such as micro-organisms and agents associated with soil, air, water, blood and blood products, and human or animal tissue and fluids • chemicals, such as acids and hydrocarbons • aerosols • sharps and broken glassware • manual handling of heavy sample bags and containers • crushing, entanglement and cuts associated with moving machinery and hand tools • vehicular and pedestrian traffic
Safety procedures	Safety procedures may include: • use of MSDS

RANGE STATEMENT	
	• use of personal protective equipment, such as hard hats, hearing protection, gloves, safety glasses, goggles, face guards, coveralls, gowns, body suits, respirators and safety boots • use of biohazard containers and laminar flow cabinets • correct labelling of reagents and hazardous materials • handling, and storing hazardous materials and equipment in accordance with labels, MSDS, manufacturer's instructions, and enterprise procedures and regulations • regular cleaning and/or decontaminating equipment and work areas • machinery guards • signage, barriers, service isolation tags, traffic control and flashing lights • lockout and tag-out procedures
Occupational health and safety (OHS) and environmental management requirements	OHS and environmental management requirements: • all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time • all operations assume the potentially hazardous nature of samples and require standard precautions to be applied • where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health

Unit Sector(s)

Unit sector	Sampling

Competency field

Competency field	

Co-requisite units

Co-requisite units		

MSL973001A Perform basic tests

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the ability to perform tests and measurements using standard methods with access to readily available advice from supervisors.

Application of the Unit

Application of the unit	This unit of competency is applicable to laboratory/field assistants working in all industry sectors. In general, they do not calibrate equipment and make only limited adjustments to the controls. They do not interpret or analyse results or troubleshoot equipment problems. Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Interpret test requirements	1.1. Review test request to identify samples to be tested, test method and equipment involved 1.2. Identify hazards and enterprise controls associated with the sample, preparation methods, reagents and/or equipment
2. Prepare sample	2.1. Record sample description, compare with specification, record and report discrepancies 2.2. Prepare sample in accordance with appropriate standard methods
3. Check equipment before use	3.1. Set up test equipment in accordance with test method 3.2. Perform pre-use and safety checks in accordance with enterprise procedures and manufacturer's instructions 3.3. Identify faulty or unsafe equipment and report to appropriate personnel 3.4. Check calibration status of equipment and report any out of calibration items to appropriate personnel
4. Perform tests on samples	4.1. Identify, prepare and weigh or measure sample and standards to be tested

ELEMENT	PERFORMANCE CRITERIA
	4.2. Conduct tests in accordance with enterprise procedures 4.3. Record data in accordance with enterprise procedures 4.4. Perform calculations on data as required 4.5. Identify and report out of specification or atypical results promptly to appropriate personnel 4.6. Shut down equipment in accordance with operating procedures
5. Maintain a safe work environment	5.1. Use established safe work practices and personal protective equipment to ensure personal safety and that of other laboratory personnel 5.2. Minimise the generation of wastes and environmental impacts 5.3. Ensure safe disposal of laboratory and hazardous wastes 5.4. Clean, care for and store equipment and reagents as required

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- interpreting enterprise procedure or standard methods accurately
- using safety information, such as material safety data sheets (MSDS) and performing procedures safely
- checking test equipment before use
- completing all tests within required timeline without sacrificing safety, accuracy or quality
- calculating, recording and presenting results accurately and legibly
- maintaining security, integrity and traceability of all samples, data/results and documentation
- cleaning and maintaining equipment

Required knowledge

REQUIRED SKILLS AND KNOWLEDGE

Required knowledge includes:

- concepts of metrology
- the international system of units (SI)
- purpose of test
- principles of the standard method
- pre-use equipment checks
- relevant standards/specifications and their interpretation
- sources of uncertainty in measurement and methods for control
- enterprise and/or legal traceability requirements
- interpretation and recording of test result, including simple calculations
- procedures for recognition/reporting of unexpected or unusual results
- relevant health, safety and environment requirements

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors should ensure that candidates can:

- accurately interpret enterprise procedures or standard methods
- complete all tests within the required timeline without sacrificing safety, accuracy or quality
- demonstrate close attention to the accuracy and precision of measurements and the data obtained
- maintain the security, integrity and traceability of all samples, data/results and documentation.

Context of and specific resources for assessment

This unit of competency is to be assessed in the workplace or simulated workplace environment.

This unit of competency may be assessed with:

- *MSL922001A Record and present data.*

Resources may include:

- standard laboratory equipped with appropriate

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	equipment standards and materials • enterprise procedures and standard methods, and equipment manuals • MSDS.
Method of assessment	The following assessment methods are suggested: • review of the quality of test data/results achieved by the candidate over time • inspection of records and workplace documentation completed by the candidate • feedback from peers and supervisors • observation of the candidate performing a range of basic tests • oral or written questioning to check underpinning knowledge of test procedures. In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability. Access must be provided to appropriate learning and/or assessment support when required. The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.
This competency in practice	Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. Manufacturing Standard testing methods may be viewed as legal requirements that must be followed to ensure that a product manufactured in a chemical plant meets the specification by which it is sold to the customer. Technical assistants perform tests in a quality control laboratory to ensure that material meets legal requirements and the material is safe and effective in use. Peroxides may be present in ether as a result of

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light-catalysed air oxidation. Peroxides are toxic and can give rise to mixtures which are explosive when distilled. Technical assistants test ether to ensure that the level of peroxide is within acceptable limits. The test is done by shaking ether with a solution of potassium iodide. After standing for 30 minutes in the dark the yellow colour of the aqueous phase, due to the liberation of iodine, must not be more intense than a prepared standard solution. These tests ensure the quality and safety of the ether.

Food processing

A snack food company produces a range of high quality, impulse purchase snack foods. Some of these products are moisture and/or oxygen sensitive and are therefore packaged in multi-layer flexible packaging to provide optimum shelflife. The packaging must also be able to withstand the rigours of the production and distribution process. While the packaging is purchased to meet the shelflife and distribution specifications, the quality assurance program requires the periodic evaluation of the packaging materials against these specifications. A laboratory assistant uses standard methods to test the tearing resistance, bursting strength, impact resistance and permeability and/or leakage of the snack food packaging. Tests are also conducted on aspects of the manufacturing process that can affect shelflife. These tests involve the measuring of the heat-seam strength and the sealing performance of the closure process. The test results are recorded by the laboratory assistant to verify the conformance of the materials to the supplier specifications and of the process to the manufacturing specifications. The assistant reports any anomalies or non-conformances to the appropriate personnel.

Construction materials testing

A technician performs an Aggregate Stripping Test (AS 1141.50) and enters the results in the laboratory's information management system (LIMS). The resulting 20-30% stripped values (i.e. 70-80% adhering) indicate a 'fail' result. The technician notes that he has repeated the test and obtained the same 'fail' result. The laboratory manager reviews the results and asks the technician to explain how he performed the test. He describes how he prepared 3-4 mm thick plates of bitumen and binding agent in the mould and then placed 50 small clean pieces of aggregate on top. After treatment in an oven for 24

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	hours and a 50°C water bath in accordance with the test method, the technician had then carefully pulled out the pieces of aggregate and avoiding any twisting motion. He then estimated the % of bitumen adhering to each of the stones with the expectation that the stripped value would be about 5% (i.e. 95% adhering). The manager is satisfied that the technician has performed the test in accordance with the method and suggested that he now re-run the test with a known aggregate as a control. This test gives a stripped value of 5-7% (i.e. 93-95% adhering). The manager is now sufficiently confident of the laboratory's results to sign and issue the test report and explain the aggregate's 'test failure' to the client.

Range Statement**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Codes of practice

Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used

Standards, codes, procedures and/or enterprise requirements

Standards, codes, procedures and/or enterprise requirements may include:

- Australian and international standards, such as:
 - AS ISO 1000-1998 The international system of units (SI) and its application
 - AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories
 - AS/NZS 2243 Set:2006 Safety in laboratories set
- Australian code of good manufacturing practice for medicinal products (GMP)
- calibration and maintenance schedules

RANGE STATEMENT	
	• enterprise recording and reporting procedures • equipment manuals • equipment startup, operation and shutdown procedures • MSDS and safety procedures • material, production and product specifications • national measurement regulations and guidelines • principles of good laboratory practice (GLP) • production and laboratory schedules • quality manuals • standard operating procedures (SOPs)
Concepts of metrology	Concepts of metrology may include: • that all measurements are estimates • measurements belong to a population of measurements of the measured parameters • repeatability • precision • accuracy • significant figures • sources of error • uncertainty • traceability
Preparation of samples	Preparation of samples may include: • sub-sampling or splitting using procedures, such as riffing, coning and quartering, manual and mechanical splitters • diluting samples • physical treatments, such as ashing, dissolving, filtration, sieving, centrifugation and comminution • moulding, casting or cutting specimens
Typical tests carried out by laboratory/field assistants	Typical tests carried out by laboratory/field assistants may include: • visual/optical tests of appearance, colour, texture, identity, turbidity, refractive index (alcohol content and Baume/Brix) • physical tests: • density, specific gravity and compacted

RANGE STATEMENT	
	- density - moisture content and water activity - particle size, particle shape and size distribution - chemical tests: - gravimetric - colorimetric - electrical conductivity (EC) and pH - specific ions using dipsticks and kits - nutrients (e.g. nitrates and orthophosphates) using basic kits - ashes, including sulphated ashes - biological/environmental tests: - pH, oxygen reduction potential (ORP), dissolved oxygen (DO) and (EC) - E coli using test kits - surface hygiene/presence of microbes - packaging tests: - tearing resistance, bursting strength and impact resistance - permeability and/or leakage - mechanical tests: - Emerson class - concrete slump
Measurements	Measurements may include: - simple ground surveys - meteorological parameters, such as wind direction/strength, rainfall, maximum/minimum temperature, humidity and solar radiation - simple background radiation survey - production/process parameters, such as temperature, flow and pressure - gas levels in a confined space
Common measuring equipment	Common measuring equipment may include: - dimension apparatus - DO and EC - analogue and digital meters and charts/recorders

RANGE STATEMENT	
	• basic chemical and biological test kits • dipsticks and site test kits (e.g. HACK) • timing devices • temperature measuring devices, such as thermometers and thermocouples
Hazards	Hazards may include: • electric shock • biohazards, such as microbiological organisms and agents associated with soil, air, water, blood and blood products, and human or animal tissue and fluids • solar radiation, dust and noise • chemicals, such as sulphuric acid, fluorides and hydrocarbons • aerosols • sharps, broken glassware and hand tools • flammable liquids • dry ice and liquid nitrogen • fluids under pressure • sources of ignition • occupational overuse syndrome, slips, trips and falls • manual handling, working at heights and working in confined spaces • crushing, entanglement and cuts associated with moving machinery or falling objects
Enterprise controls to address hazards	Enterprise controls to address hazards may include: • use of MSDS • use of signage, barriers and service isolation tags • use of personal protective equipment, such as hard hats, hearing protection, sunscreen lotion, gloves, safety glasses, goggles, face guards, coveralls, gowns, body suits, respirators and safety boots • use of appropriate equipment, such as biohazard containers and cabinets and laminar flow cabinets • recognising and observing hazard warnings and safety signs

RANGE STATEMENT	
	• labelling of samples, reagents, aliquoted samples and hazardous materials • handling and storage of all hazardous materials and equipment in accordance with labelling, MSDS and manufacturer's instructions, and enterprise procedures and regulations • cleaning and decontaminating equipment and work areas regularly using recommended procedures • following established manual handling procedures for tasks involving manual handling
Minimising environmental impacts	Minimising environmental impacts may involve: • recycling of non-hazardous waste, such as chemicals, batteries, plastic, metals and glass • appropriate disposal of hazardous waste • correct disposal of excess sample/test material • correct storage and handling of hazardous chemicals
Occupational health and safety (OHS) and environmental management requirements	OHS and environmental management requirements: • all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time • all operations assume the potentially hazardous nature of samples and require standard precautions to be applied • where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health

Unit Sector(s)

Unit sector	Testing

Competency field

Competency field	

Co-requisite units

Co-requisite units		

MSL973002A Prepare working solutions

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the ability to prepare working solutions and to check that existing stocks are suitable for use. Calculations of quantities, choice of reagent grades and required dilutions will be specified by the supervisor.

Application of the Unit

Application of the unit	This unit of competency is applicable to laboratory assistants working in all industry sectors. Test solutions include those required to perform laboratory tests. Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Safely use laboratory chemicals, glassware and equipment	1.1. Apply appropriate safety precautions for use of laboratory equipment and hazardous chemical materials 1.2. Use appropriate laboratory glassware and measuring equipment 1.3. Clean and store glassware and equipment in accordance with enterprise procedures
2. Make up working solutions	2.1. Identify the relevant standard methods for solution preparation 2.2. Assemble specified laboratory equipment 2.3. Select and prepare materials and solvent of specified purity 2.4. Measure appropriate quantities of reagents for solution preparation and record data 2.5. Prepare labels and log solution details in laboratory register 2.6. Transfer solutions to appropriately labelled containers
3. Check existing stock of solutions	3.1. Monitor shelf life of working solutions according to laboratory procedures

ELEMENT	PERFORMANCE CRITERIA
	3.2. Replace out-of-date or reject solutions according to laboratory procedures 3.3. Conduct routine titrimetric analyses, if appropriate, to determine if solutions are fit for purpose

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- using appropriate materials, equipment and procedures to prepare solutions
- following appropriate occupational health and safety (OHS), and hygiene procedures, if appropriate
- using all equipment safely and efficiently
- using enterprise procedures to calculate concentrations
- identifying solutions not fit for use
- using titrations to determine the concentration of solutions
- labelling, storing and disposing of solutions appropriately
- recording and presenting data appropriately

Required knowledge

Required knowledge includes:

- relevant biological, chemical, food and laboratory terminology
- principles of metrology
- the international system of units (SI)
- concentration terms, such as % w/w, % w/v, % v/v, ppm (mg/L) and molarity
- basic theory of acids, bases, salts, buffers and neutralisation
- enterprise procedures for preparing solutions
- calculations required to prepare specified amounts of solutions of specified concentration
- appropriate OHS procedure for preparing, handling and disposal of solutions
- use of material safety data sheets (MSDS)
- relevant health, safety and environment requirements

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors should ensure that candidates can:

- prepare working solutions in compliance with relevant standards, appropriate procedures and/or enterprise requirements
- follow OHS procedures to safely use laboratory chemicals glassware and equipment
- make up working solutions according enterprise procedures
- check existing stocks of solutions as being fit for purpose.

Context of and specific resources for assessment

This unit of competency is to be assessed in the workplace or simulated workplace environment.

This unit of competency may be assessed with:

- *MSL922001A Record and present data*
- *MSL943002A Participate in laboratory/field workplace safety.*

Resources may include:

- standard laboratory equipped with appropriate equipment and reagents
- SOPs and testing methods
- access to appropriate containers and storage facilities.

Method of assessment

The following assessment methods are suggested:

- inspection of solutions prepared, labelled and stored by the candidate
- review of solution records and workplace documentation completed by the candidate
- feedback from peers and supervisors
- observation of the candidate preparing working solutions
- oral or written questioning.

In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess

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	directly. Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability. Access must be provided to appropriate learning and/or assessment support when required. The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.
This competency in practice	Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and show its relevance in a workplace setting. Manufacturing When starting materials used for the manufacture of common household materials are in transit from the supplier to the manufacturer, they may degrade if subjected to conditions, such as heat, moisture, light and oxygen. Even when the supplier ships quality materials to the manufacturing plant, the materials may be sub-standard when they arrive. Quality control tests are designed to test starting materials to ensure they are within specification. For example, aspirin forms salicylic acid when stored under adverse conditions. Laboratory assistants prepare and monitor the quality of solutions, such as ferric chloride solution, which gives an intense violet colour when added to salicylic acid but gives no colour with aspirin. Absence of the violet colouration indicates that breakdown of the aspirin hasn't occurred. Biomedical A laboratory assistant made up 1 litre of buffer solution using buffer tablets and a 1 litre volumetric flask as specified in the method. To ensure the solution was suitable for use the assistant measured the pH and found it was within acceptable range. The assistant then appropriately labelled a storage vessel and stored the buffer according to requirements. By following enterprise procedures the shelf life of the buffer was maximised.

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	Environmental An environmental laboratory is contracted to determine the acidity of water samples taken from local lakes and streams. A laboratory assistant is required to make up small batches of 0.01M sodium hydroxide and to determine its concentration by titrating it against a standard solution of potassium acid phthalate using phenolphthalein indicator. This procedure is carried out monthly to ensure that the concentration of the sodium hydroxide solution is accurately known. Alternatively, the laboratory assistant may be required to prepare and standardise a fresh batch of sodium hydroxide on a monthly basis. In this case, he/she must understand the underpinning knowledge of basic acid/base theory, potential problems of interferences (such as slow absorption of carbon dioxide by sodium hydroxide solution) so as to ensure that the concentrations of workup solutions are accurately known. He/she must also be skilled in calculating and performing dilution when required to prepare such low concentrations (0.01M) of working solutions.

Range Statement**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Codes of practice	Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used
Standards, codes, procedures and/or enterprise requirements	Standards, codes, procedures and/or enterprise requirements may include: • Australian and international standards, such as: • AS 2163-2000 Laboratory glassware - Measuring cylinders

RANGE STATEMENT	
	• AS 2165-1996 Laboratory glassware - Burettes AS 2162.1-1996 Verification and use of volumetric apparatus - General - Volumetric glassware • AS ISO 1000-1998 The international system of units (SI) and its application • AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories • AS/NZS 2243 Set:2006 Safety in laboratories set • Australian code of good manufacturing practice for medicinal products (GMP) • calibration and maintenance schedules • enterprise recording and reporting procedures • equipment manuals • equipment startup, operation and shutdown procedures • MSDS and safety procedures • material, production and product specifications • national measurement regulations and guidelines • principles of good laboratory practice (GLP) • production and laboratory schedules • quality manuals • standard operating procedures (SOPs)
Concepts of metrology	Concepts of metrology may include: • that all measurements are estimates • measurements belong to a population of measurements of the measured parameters • repeatability • precision • accuracy • significant figures • sources of error • uncertainty • traceability
Typical test solutions	Typical test solutions may include: • solutions required for diagnostic/analytical and limit tests in food and chemical laboratories,

RANGE STATEMENT	
	such as sulphates, chlorides and heavy metals • solutions, such as stains for standard diagnostic/analytical procedures in biomedical/environmental laboratories, such as cell staining, fixation of cells and tissues, suspension of cells and titrimetric indicators • solutions required for laboratory maintenance and disinfection, such as 70% ethanol and hypochlorite
Laboratory equipment	Laboratory equipment may include: • pH meters • balances • magnetic stirrers, water baths and hot plates • measuring cylinders, beakers, conical flasks, volumetric flasks, pipettes and burettes • filter papers and funnels • fume cupboards
Hazards	Hazards may include: • corrosive chemicals, such as acids and alkalis • sources of heat, such as burners • sharps and broken glassware • spillages
Safety precautions	Safety precautions may include: • use of MSDS • use of personal protective equipment, such as safety glasses, gloves and coveralls • correct labelling of reagents and hazardous materials • handling and storing hazardous materials and equipment in accordance with labels, MSDS, manufacturer's instructions, and enterprise procedures and regulations • regular cleaning and/or decontamination of equipment and work areas
Monitoring quality of solutions	Monitoring quality of solutions may include: • noting turbidity to exclude absorption of moisture • noting deposits to exclude microbial contamination or chemical degradation

RANGE STATEMENT	
	- noting crystals to exclude evaporation - conducting titrations to check concentration - noting colour changes indicating a pH shift with solutions containing indicators - checking expiry dates on solution containers
Occupational health and safety (OHS) and environmental management requirements	OHS and environmental management requirements: - all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time - all operations assume the potentially hazardous nature of samples and require standard precautions to be applied - where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health

Unit Sector(s)

Unit sector	Testing

Competency field

Competency field	

Co-requisite units

Co-requisite units		

Co-requisite units		

MSL974001A Prepare, standardise and use solutions

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the ability to prepare, standardise and monitor the quality of solutions.

Application of the Unit

Application of the unit	This unit of competency is applicable to laboratory technicians working in all industry sectors. Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare solutions	1.1. Select appropriate procedure for solution preparation 1.2. Select equipment, materials and solvent of specified purity 1.3. Measure appropriate quantities of reagents for solution preparation and record data. 1.4. Select and assemble specified laboratory equipment and appropriate grade of glassware 1.5. Perform specified dilutions 1.6. Prepare solutions to achieve homogeneous mix of the specified concentration 1.7. Label and store solutions to maintain identity and stability
2. Standardise and use volumetric solutions	2.1. Assemble appropriate laboratory equipment 2.2. Perform serial dilutions as required 2.3. Standardise the solution to the required specified range and precision 2.4. Label and store solutions to maintain identity and stability 2.5. Use standard volumetric solutions to determine concentration of unknown solutions
3. Calculate and record data	3.1. Calculate specified concentrations 3.2. Use authorised procedure if data is to be modified

ELEMENT	PERFORMANCE CRITERIA
	3.3. Estimate and document uncertainty of measurement in accordance with enterprise procedures, if required 3.4. Record all relevant details according to laboratory procedures and report results 3.5. Report concentration with appropriate units
4. Monitor the quality of laboratory solutions	4.1. Check solutions for visual deterioration and expiry date 4.2. Restandardise or dispose of dated or deteriorated solutions 4.3. Record details and label solutions according to laboratory procedures
5. Maintain a safe work environment	5.1. Use established safe work practices and personal protective equipment to ensure personal safety and that of other laboratory personnel 5.2. Clean up spills using appropriate techniques to protect personnel, work area and environment 5.3. Minimise generation of waste and environmental impacts 5.4. Ensure the safe collection of laboratory and hazardous waste for subsequent disposal 5.5. Store equipment and reagents as required

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- interpreting and following enterprise standard operating procedures (SOPs)
- determining equivalence points using indicators and graphical methods
- using calculation methods, including appropriate units, uncertainties, balancing equations, the concentration of the solution given the chemical reaction for the titration
- using apparatus and reagents to prepare standard solutions such as balances and volumetric glassware
- selecting and using primary and secondary standards and indicators
- performing quality assurance checks for solution performance

REQUIRED SKILLS AND KNOWLEDGE

- performing titrations
- recognising control results that are not within acceptable range
- interpreting and using safety information, such as that provided by material safety data sheets (MSDS) and follow relevant safety procedures

Required knowledge

Required knowledge includes:

- solution terminology, chemistry of acids, bases, buffers, redox reactions and compleximetric reactions
- concepts of metrology
- grades of glassware, reagents and their use
- reactions used for standardisation and desirable characteristics
- enterprise communication and reporting procedures
- occupational health and safety (OHS) procedures, including those for using corrosive materials
- relevant health, safety and environment requirements

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment**Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Assessors should ensure that candidates can:

- use balances and volumetric glassware
- select and use primary and secondary standards
- select and use indicators
- perform quality assurance checks for solution performance
- perform titrations using laboratory procedures with required accuracy and precision and within required timelines
- calculate the concentration of the solution given the chemical reaction for the titration
- recognise control results that are not within acceptable range

EVIDENCE GUIDE	
	• record results to enterprise standards • label and store solutions in accordance with enterprise procedures • interpret and follow enterprise SOPs • interpret and use safety information, such as that provided by MSDS and follow relevant safety procedures.
Context of and specific resources for assessment	This unit of competency is to be assessed in the workplace or simulated workplace environment. This unit of competency may be assessed with: • <i>relevant MSAL974000 series units of competency, and</i> • <i>relevant MSAL975000 series units of competency dealing with sampling, tests and measurements.</i> Resources may include: • standard laboratory equipped with appropriate volumetric equipment • laboratory reagents and equipment • SOPs and testing methods.
Method of assessment	The following assessment methods are suggested: • inspection and/or testing of solutions prepared by the candidate • review of records and workplace documentation completed by candidate • review of work outputs by the candidate over time to ensure accuracy, consistency and timeliness • feedback from peers and supervisors • observation of the candidate preparing, standardising and using a range of solutions • oral or written questioning. In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability. Access must be provided to appropriate learning and/or

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	assessment support when required. The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.
This competency in practice	Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. Manufacturing A standard solution is used to determine the concentration of unknown solutions. The quality of these analyses is critically related to the accuracy with which the concentration of the standard solution is known. Therefore, laboratory technicians spend considerable effort to ensure that the materials and methods used for the preparation and standardisation will lead to a solution of accurately known concentration. For example, anhydrous sodium carbonate is often used to prepare solutions to determine the concentrations of acids. The sodium carbonate is heated at a suitable temperature to remove any trace of moisture and cooled in a dessicator. An appropriate quantity is dissolved in distilled water and made up to volume in a volumetric flask. This solution of known concentration is then titrated with acids of unknown concentration and the concentration of the acids determined. Environmental A laboratory technician was required to determine the total acidity of a water sample as part of a quality control program. The total acidity was measured by titrating the water sample with sodium hydroxide of known concentration using an appropriate indicator. The concentration of the sodium hydroxide was determined via a volumetric titration against a primary standard of potassium hydrogen phthalate. The value of the total acidity was determined by multiplying the volume of sodium hydroxide used with a numerical 'factor' which had been determined by the laboratory supervisor in order to save time. The value of the 'factor' was displayed on the titration equipment. However, a new technical assistant did the full calculation and found that his/her result differed slightly

EVIDENCE GUIDE

	from that obtained using the 'factor'. After discussion with the laboratory supervisor it was agreed that the error was in the 'factor' and the assumption that each new batch of sodium hydroxide prepared was exactly the same concentration as all previous batches. This was incorrect as the concentration of each batch differed slightly and its actual concentration was determined accurate, using the primary standard. The procedure was changed so that the full calculation was required for all tests.

Range Statement**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Codes of practice

Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used

Standards, codes, procedures and/or enterprise requirements

Standards, codes, procedures and/or enterprise requirements may include:

- Australian and international standards, such as:
 - AS 2163-2000 Laboratory glassware - Measuring cylinders
 - AS 2165-1996 Laboratory glassware - Burettes AS 2162.1-1996 Verification and use of volumetric apparatus - General - Volumetric glassware
 - AS ISO 1000-1998 The international system of units (SI) and its application
 - AS/NZS ISO 9000 Set:2008 Quality management systems set
 - AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories

RANGE STATEMENT	
	• AS/NZS 2243 Set:2006 Safety in laboratories set • Australian code of good manufacturing practice for medicinal products (GMP) • calibration and maintenance schedules • enterprise recording and reporting procedures • equipment manuals • equipment startup, operation and shutdown procedures • MSDS and safety procedures • material, production and product specifications • national measurement regulations and guidelines • principles of good laboratory practice (GLP) • production and laboratory schedules • quality manuals • SOPs • waste minimisation and safe disposal procedures
Solutions	Solutions may include but are not limited to: • solutions of strong/weak acids and bases • oxidising/reducing agents • solutions used for complexometric or precipitation titrations • stains for cells and tissues, enzymes, buffers and antibodies • diluents for maintaining isotonicity • organic solutions and histological fixatives
Apparatus and reagents to prepare standard solutions	Apparatus and reagents to prepare standard solutions may include: • balances • pipettes, burettes, volumetric glassware and weighing bottles • dessicators and filtering media • ovens and muffle furnaces • solutions, indicators and primary and secondary standards • auto titrators, pH meters and other related meters and electrodes for determining equivalence points, top pan and analytical

RANGE STATEMENT	
	balances • magnetic stirrers and heaters, and water baths
Checking useability of solutions	Checking useability of solutions may include: • examining stained samples for correct staining reactions • performing pH checks • confirming enzyme activity • checking red cell suspensions for haemolysis • ferric chloride for phenolic solutions • isotonicity for saline
Hazards	Hazards may include: • chemicals, such as strong acids and bases, and stains • sharps and broken glassware • burners, hot plates, ovens and furnaces
Safe work practices	Safe work practices may include: • use of MSDS • use of personal protective equipment, such as gloves, safety glasses, goggles, faceguards, coveralls and gowns • use of biohazard containers, laminar flow cabinets and fume hoods • correct labelling of reagents and hazardous materials • handling and storing hazardous materials and equipment in accordance with labels, MSDS, manufacturer's instructions, and enterprise procedures and regulations • regular cleaning and/or decontaminating of equipment and work areas
Occupational health and safety (OHS) and environmental management requirements	OHS and environmental management requirements • all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time • all operations assume the potentially hazardous nature of samples and require standard

RANGE STATEMENT	
	precautions to be applied where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health

Unit Sector(s)

Unit sector	Testing

Competency field

Competency field	

Co-requisite units

Co-requisite units		

MSS402001A Apply competitive systems and practices

Modification History

New unit, superceding MSACMS200A Apply competitive manufacturing practices - Equivalent

Unit Descriptor

This unit of competency covers the skills and knowledge required to implement basic improvement practices within an organisation using competitive systems and practices. The unit focuses on bringing together the basic concepts and the holistic application of these basic concepts and processes to operations. It would typically be carried out working as part of a team.

Application of the Unit

This unit applies to an individual in an organisation that has embarked on competitive systems and practices. The unit covers the skills and knowledge required to contribute to the competitive systems and practices processes and assumes that they are to be used within the scope of the individual's job and authority.

This unit requires the application of skills associated with planning and organising an individual's own role within the competitive systems and practices framework.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of

performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1	Identify own place in the value chain	1.1	Identify customers relevant to own work and their needs/requirements
		1.2	Identify suppliers for own work
		1.3	Identify value contributions along the chain
		1.4	Identify and recommend methods of increasing own contribution to the value chain
2	Improve the product and process value	2.1	Identify customer features/benefits in the product and process
		2.2	Identify aspects of product and process which contribute to customer features/benefits
		2.3	Identify aspects of product and process which do not contribute to customer benefits/features
		2.4	Recommend methods of reducing waste and increasing features/benefits
3	Use competitive systems and practices	3.1	Identify competitive systems and practices used in organisation and own work area
		3.2	Apply practices appropriate for the job or process
		3.3	Monitor the job/process and make adjustments to improve it in accordance with procedures
		3.4	Identify own skill requirements and seek skill development, if required

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- communicating with others to clarify scope of competitive systems and practices implementation and contributing suggestions for improvement
- visualising normal operational procedures in terms of flow and contribution to customer outcomes
- planning own tasks to support competitive systems and practices implementation
- implementing competitive systems and practices in own work area according to instructions
- identifying waste (muda)

Required knowledge

Required knowledge includes:

- internal and external customers and the value they derive from operations
- suppliers, their capabilities and contribution to value (this may be obtained from an existing value stream map or other enterprise documentation)
- waste (muda)
- relevant competitive systems and practices for own job and how to apply them
- factors impacting on product, operations and waste, particularly those wholly or partially under their control (and how to control them)

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	A person being assessed against this unit will work effectively in a competitive systems and practices environment, making continual positive contributions to the improvement of the business within the scope of their job.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	A person who demonstrates competency in this unit must be able to provide evidence of the ability to: • identify the scope of competitive systems and

	practices implemented in their work area • identify services and/or functions supplied by suppliers and to customers • identify own tasks and responsibilities and relate them to organisation and customer requirements • identify aspects of products and process which add to or detract from customer benefit • contribute suggestions for improvement.
Context of and specific resources for assessment	Assessment of performance must be undertaken in a workplace using or implementing one or more competitive systems and practices. Access may be required to: • workplace procedures and plans relevant to work area • specifications and documentation relating to planned, currently being implemented, or implemented changes to work processes and procedures relevant to the assessee • documentation and information in relation to production, waste, overheads, and hazard control/management • reports from supervisors/managers • case studies and scenarios to assess responses to contingencies.
Method of assessment	A holistic approach should be taken to the assessment. Competence in this unit may be assessed by using a combination of the following to generate evidence: • demonstration in the workplace • workplace projects • suitable simulation • case studies/scenarios (particularly for assessment of contingencies, improvement scenarios, and so on) • targeted questioning • reports from supervisors, peers and colleagues (third-party reports) • portfolio of evidence. In all cases it is expected that practical assessment will be combined with targeted questioning to assess underpinning knowledge. Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.

Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the candidate and the work being performed.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Competitive systems and practices	Competitive systems and practices may include, but are not limited to: • lean operations • agile operations • preventative and predictive maintenance approaches • monitoring and data gathering systems, such as Systems Control And Data Acquisition (SCADA) software, Enterprise Resource Planning (ERP) systems, Materials Resource Planning (MRP) and proprietary systems • statistical process control systems, including six sigma and three sigma • Just in Time (JIT), kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts • standard procedures • current reality tree Competitive systems and practices should be interpreted

	so as to take into account: - the stage of implementation of competitive systems and practices - the size of the enterprise - the work organisation, culture, regulatory environment and the industry sector
Customers	Customers may include: - internal or external customers and should be sufficiently close to the individual's work as to be easily identifiable - final customers used as the basis for the identification of value and waste The individual does not need to interface directly with the external customer, but should be provided with sufficient information to enable them to identify customer benefits and customer features
Suppliers	Suppliers may be: internal or external suppliers and should be sufficiently close to the individual's work as to be easily identifiable The operator does not need to interface directly with external suppliers, but should be provided with sufficient information to enable them to identify supplier contribution to their own work and to customer benefit
Procedures	Procedures may include: - work instructions - standard operating procedures - formulas/recipes - batch sheets - temporary instructions and similar instructions provided for the smooth running of the organisation - good operating practice as may be defined by industry codes of practice (e.g. good manufacturing practice (GMP) and responsible care) and government regulations Procedures may be: - written, verbal, computer-based or in some other format

Unit Sector(s)

Unit sector

Competitive systems and practices

Custom Content Section

Not applicable.

MSS402002A Sustain process improvements

Modification History

New unit, superseding MSACMS201A Sustain process improvements - Not equivalent

Unit Descriptor

This unit of competency covers the skills and knowledge required to prevent process improvements in their own work from slipping back to former practices or digressing to less efficient practices.

Application of the Unit

This unit applies to organisations implementing competitive systems and practices and continuous improvement. It covers the skills needed to ensure that process improvements are sustained and opportunities taken to suggest further improvements.

Improvement initiatives can be made by any of a number of methods and by teams or individuals. The unit assumes that desired levels of performance or quality are known to employees.

The unit can be applied to all areas of an organisation, including production, maintenance, logistics and office functions.

This unit requires the application of skills associated with problem solving, initiative and enterprise and self-management in order to understand implement and monitor improvement practices. It also requires the ability to identify and address personal skill gaps in order to manage own ability to implement change.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the Performance criteria describe the performance needed to

essential outcomes of a unit of competency.

demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1	Examine previous improvements	1.1	Identify impact of previous process improvements to equipment, operations, services or products in own work area
		1.2	Identify improvements where objectives have not been met
2	Implement corrective actions	2.1	Identify corrective actions that can be taken by self on process improvements that have not met objectives
		2.2	Obtain any required approvals
		2.3	Identify any additional, personal skill gaps and seek skill development
		2.4	Adopt improved processes
3	Check changes	3.1	Identify claimed improvements
		3.2	Identify methods of observing and measuring claimed improvements in own work area
		3.3	Check if claimed improvements are occurring and report problems in accordance with procedures
4	Check for further improvements	4.1	Look for areas of possible further improvement
		4.2	Discuss further improvements with peers and supervisors
		4.3	Take action to implement improvements in accordance with procedures

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- communicating with others to clarify scope and stage of implementation of competitive systems and practices and contribute suggestions for further improvements in implementation
- visualising normal operational procedures in terms of flow and contribution to customer outcomes
- planning own tasks to support competitive systems and practices implementation
- implementing competitive systems and practices in own work area according to instructions
- identifying waste (muda)
- monitoring competitive systems and practices performance indicators in own work and work area

Required knowledge

Required knowledge includes:

- internal and external customers and the value they derive from own work area operations
- suppliers to own work area, their capabilities and contribution to customer benefit
- waste (muda)
- relevant competitive systems and practices for own job and how to apply and monitor the outcomes
- factors impacting on product, operations and waste, particularly those wholly or partially under their control (and how to control them)

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	A person being assessed against this unit will be able to demonstrate their willing adoption of new equipment, processes, procedures and practices as well as their

	expertise at implementing them and making critical reviews of their performance in line with their level of competence and authority.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	A person who demonstrates competency in this unit must be able to provide evidence of the ability to: • implement and monitor process improvements in own work area against objectives • contribute suggestions for further improvement/s • apply procedures for seeking approvals and reporting non-conformances.
Context of and specific resources for assessment	Assessment of performance must be undertaken in a workplace using or implementing one or more competitive systems and practices. Access may be required to: • workplace procedures and plans relevant to work area • specifications and documentation relating to planned, currently being implemented, or implemented changes to work processes and procedures relevant to the assessee • documentation and information in relation to production, waste, overheads and hazard control/management • reports from supervisors/managers • case studies and scenarios to assess responses to contingencies.
Method of assessment	A holistic approach should be taken to the assessment. Competence in this unit may be assessed by using a combination of the following to generate evidence: • demonstration in the workplace • workplace projects • suitable simulation • case studies/scenarios (particularly for assessment of contingencies, improvement scenarios, and so on) • targeted questioning • reports from supervisors, peers and colleagues (third-party reports) • portfolio of evidence. In all cases it is expected that practical assessment will be combined with targeted questioning to assess underpinning knowledge. Where applicable, reasonable adjustment must be made

	to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.
Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the candidate and the work being performed.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Competitive systems and practices	Competitive systems and practices may include, but are not limited to: • lean operations • agile operations • preventative and predictive maintenance approaches • monitoring and data gathering systems, such as Systems Control and Data Acquisition (SCADA) software, Enterprise Resource Planning (ERP) systems, Materials Resource Planning (MRP) and proprietary systems • statistical process control systems, including six sigma and three sigma • Just in Time (JIT), kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts

	• standard procedures • current reality tree Competitive systems and practices should be interpreted so as to take into account: • the stage of implementation of competitive systems and practices • the size of the enterprise • the work organisation, culture, regulatory environment and industry sector
Customers	Customers may be: • internal or external customers and should be sufficiently close to the individual's work as to be easily identifiable • final customers used as the basis for the identification of value and waste The individual does not need to interface directly with the external customer, but should be provided with sufficient information to enable them to identify customer benefits and customer features
Suppliers	Suppliers may be: • internal or external suppliers and should be sufficiently close to the individual's work as to be easily identifiable The operator does not need to interface directly with external suppliers, but should be provided with sufficient information to enable them to identify supplier contribution to their own work and to customer benefit
Measuring improvements	Measuring improvements may include: • personally taking measurements • arranging for measurements to be taken/made by appropriate personnel
Procedures	Procedures may include: • work instructions • standard operating procedures • formulas/recipe • batch sheets • temporary instructions and similar instructions provided for the smooth running of the plant • good operating practice as may be defined by industry codes of practice (e.g. good manufacturing

	practice (GMP) and responsible care) and government regulations Procedures may be: written, verbal, computer-based or in some other format
Improvements	Improvements include: - techniques for preventing mistakes by designing the operations process, equipment and tools so that an operation literally cannot be performed incorrectly (e.g. baka-yoke) - techniques that generate warning signals were a mistake is about to be performed (poka-yoke)

Unit Sector(s)

Unit sector

Competitive systems and practices

Custom Content Section

Not applicable.

MSS402010A Manage the impact of change on own work

Modification History

New unit, superseding MSACMC210A Manage the impact of change on own work - Equivalent

Unit Descriptor

This unit of competency covers the skills and knowledge required by an employee to effectively manage the changes in their own work resulting from their organisation's implementation of competitive systems and practices.

Application of the Unit

This unit applies to an employee in an organisation implementing competitive systems and practices that affect the employee's own work. The unit includes the skills required to positively participate in ongoing and continuous change as it affects their work. The employee will be expected to deal with these changes as part of a team and to give feedback from their own perspective.

This unit requires the application of skills associated with problem solving, planning and organising and self-management for assessing and managing the impact of change on own work. This unit also requires the ability to seek information and feedback from team members on the impact of changes and suggested improvements.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of

performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1	Examine the impact of change on own work practices	1.1	Identify competitive systems and practices relevant to changes in own work
		1.2	Examine changes to work flow
		1.3	Examine changes to equipment/process/physical environment
		1.4	Examine changes to work relationship with team members and other teams
		1.5	Examine changes to data collection needs
		1.6	Examine changed work for impacts on health, safety and environment (HSE)
		1.7	Examine changes to quality requirements
		1.8	Identify any additional individual skill needs
		1.9	Identify other areas requiring assistance
2	Implement change	2.1	Review changes which may have an adverse impact with team leader
		2.2	Adopt changes to individual work practice
		2.3	Seek assistance in gathering/processing data, as required
		2.4	Implement the data collection/processing and take actions on resulting information in accordance with procedures
		2.5	Seek assistance/training to meet needs caused by change
3	Implement continuous	3.1	Critically examine all changes
		3.2	Identify impacts of changes both up and down the

improvement

immediate value stream

3.3 Identify areas for improvement

3.4 Make recommendations for improvement in accordance with procedures

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- identifying the competitive systems and practices being implemented in the organisation that are relevant to own work, including, if implemented:
 - Just in Time (JIT) and kanban systems
 - preventative maintenance
 - 5S housekeeping
 - continuous improvement processes (e.g. kaizen)
 - waste (muda) elimination
 - formal problem solving procedures (e.g. root cause analysis (RCA))
- analysing own work procedures
- communicating with others in work area, team leaders and other employees relevant to changes in own work
- solving problems relevant to changes in own work
- identifying sources of assistance in organisation if difficulty is experienced with changes
- interpreting relevant procedures and instructions
- working as part of a team

Required knowledge

Required knowledge includes:

- features of common competitive systems and practices sufficient for identification, including:
 - JIT and kanban systems
 - preventative maintenance
 - 5S housekeeping
 - continuous improvement processes (e.g. kaizen)

- waste (muda) elimination
- formal problem solving procedures (e.g. RCA)
- current processes and principles of operation
- sources of data on the process/plant and possible applications to information
- methods of determining own skill needs and developing skills, if required
- HSE principles as relevant to own job
- change implementation contacts and procedures relevant to work area
- employee assistance mechanisms in the organisation

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	A person who demonstrates competency in this unit must be able to provide evidence of the ability to: • identify the competitive systems and practices used in their own work • identify changes to their own work flowing from the implementation of the relevant competitive systems and practices • implement changes • know when and how to seek assistance with work changes • make suggestions for improvements.
Context of and specific resources for assessment	Assessment of performance must be undertaken in a workplace using or implementing one or more competitive systems and practices. Access may be required to: • workplace procedures and plans relevant to work area • specifications and documentation relating to planned, currently being implemented, or implemented changes to work processes and procedures relevant to the assessee • documentation and information in relation to production, waste, overheads and hazard control/management • reports from supervisors/managers • case studies and scenarios to assess response to

	contingencies.
Method of assessment	A holistic approach should be taken to the assessment. Competence in this unit may be assessed by using a combination of the following to generate evidence: • demonstration in the workplace • workplace projects • suitable simulation • case studies/scenarios (particularly for assessment of contingencies, improvement scenarios, and so on. • targeted questioning • reports from supervisors, peers and colleagues (third-party reports) • portfolio of evidence. In all cases it is expected that practical assessment will be combined with targeted questioning to assess underpinning knowledge. Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.
Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the candidate and the work being performed.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Competitive systems and practices	Competitive systems and practices may include, but are not limited to: • lean operations • agile operations • preventative and predictive maintenance approaches • monitoring and data gathering systems such as Systems Control and Data Acquisition (SCADA)

	software, Enterprise Resource Planning (ERP) systems, Materials Resource Planning (MRP) and proprietary systems • statistical process control systems, including six sigma and three sigma • JIT, kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts • standard procedures • current reality tree Competitive systems and practices should be interpreted so as to take into account: • the stage of implementation of competitive systems and practices • the size of the enterprise • the work organisation, culture, regulatory environment and the industry sector
Managing impact of change	Managing impact of change may include: • elements being undertaken individually or as part of a team • seeking assistance from team leaders for areas outside the employee's range of responsibility and authority
Procedures	Procedures may include: • all work instructions • standard operating procedures • formulas/recipes • batch sheet • temporary instructions and similar instructions provided for the smooth running of the plant • good operating practice as may be defined by industry codes of practice (e.g. good manufacturing

	practice (GMP) and responsible care) and government regulations Procedures may be: written, verbal, computer-based or in some other format
Gathering and monitoring performance data	The gathering and monitoring of performance data may be: - undertaken manually by individual employees through charts, tally sheets or keypad/board entry - collected automatically through software, such as SCADA software, ERP systems, MRP and proprietary systems
Continuous improvement	Continuous improvement in competitive systems and practices (often referred to as kaizen) includes: the continual evaluation and improvement of all process in terms of time required, resources used, resultant quality, and other aspects relevant to the process
Value stream	The value stream begins with the customer and includes all actions (both value adding and non-value added) by both internal sections/departments and external organisations to meet a customer requirement. Depending on the operations and the customer requirement stages where value stream actions may occur include: - sales outlet/representative - information gathering, data analysis and research - product design - raw material sourcing - intermediate processing - final assembler/collation/preparation - support services (e.g. accounting, finance and legal) - storage and delivery to customer - after market support

Unit Sector(s)

Unit sector

Competitive systems and practices

Custom Content Section

Not applicable.

MSS402030A Apply cost factors to work practices

Modification History

New unit, superseding MSACMT230A Apply cost factors to work practices - Equivalent

Unit Descriptor

This unit of competency covers the skills and knowledge required by an individual to identify cost components in their work and to be able to determine, in general terms, the cost impacts of alternative actions.

Application of the Unit

This unit applies to an individual who is required to contribute to, and be involved in, the assessment of cost factors in their work. This may be done individually or in a team environment.

The unit covers the skills to be able to assess the relative costs of the alternatives and use this as one of the key factors in making decisions. Decisions are made within the scope of the employee's authority and according to procedures. Typical decisions include those that contribute to the efficient organisation of own work and the improvement of production time and cycle times.

This unit requires the application of skills associated with problem solving to identify cost factors and cost implications of own work and self-management to apply cost-effective practices.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised

unit of competency. text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1	Identify the major cost components of product or process in own work area	1.1	Identify cost components in the product or process in own work area
		1.2	Recognise the impact of current or alternative actions on costs
2	Identify constraints to cost-efficiency	2.1	Identify required production/process rate and major costs
		2.2	Identify costs factors under individual or team control
		2.3	Relate identified costs factors to impact on overall cost of production/process
		2.4	Identify cost factors that are a constraint to cost-efficiency in own work area
3	Apply cost-efficient work practices	3.1	Identify and explain to relevant people the implications of possible actions/changes to improve cost-efficiency in simple financial terms
		3.2	Identify non-financial implications of proposed changes in discussion with relevant people
		3.3	Select actions which minimise overall costs
		3.4	Monitor actions to ensure cost-efficiency in own work area is maintained

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- communicating with others to clarify cost factors and contribute suggestions for improvement
- visualising normal operational procedures in terms of flow
- distinguishing between fixed and variable costs
- identifying fixed and variable cost components relevant to own work, including where applicable:
 - power/energy
 - materials, plant and equipment
 - production or process time, including impact on salary and wages
 - office expenses
 - government taxes and charges

Required knowledge

Required knowledge includes:

- cost components of products made
- costs concepts, such as expense and income
- major cost contributors to product (e.g. energy)
- the difference between internally and externally controlled costs
- difference between overhead, labour and consumables

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	A person who demonstrates competency in this unit must be able to provide evidence of the ability to: • identify the scope of their own and their teams work and relate it to the overall flow of work in the organisation • express cost factors in specific terms (e.g. cost per

	item, process and task) and not just in a general manner • identify and express costs factors in simple financial terms • use cost factors to select lower cost alternatives when making decisions.
Context of and specific resources for assessment	Assessment of performance must be undertaken in a workplace using or implementing one or more competitive systems and practices. Access may be required to: • workplace procedures and plans relevant to work area • specifications and documentation relating to planned, currently being implemented, or implemented changes to work processes and procedures relevant to the assessee • documentation and information in relation to production, waste, overheads and hazard control/management • reports from supervisors/managers • case studies and scenarios to assess responses to contingencies.
Method of assessment	A holistic approach should be taken to the assessment. Competence in this unit may be assessed by using a combination of the following to generate evidence: • demonstration in the workplace • workplace projects • suitable simulation • case studies/scenarios (particularly for assessment of contingencies, improvement scenarios, and so on) • targeted questioning • reports from supervisors, peers and colleagues (third-party reports) • portfolio of evidence. In all cases it is expected that practical assessment will be combined with targeted questioning to assess underpinning knowledge. Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.
Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and

	literacy capacity of the candidate and the work being performed.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Competitive systems and practices	Competitive systems and practices may include, but are not limited to: • lean operations • agile operations • preventative and predictive maintenance approaches • monitoring and data gathering systems, such as Systems Control and Data Acquisition (SCADA) software, Enterprise Resource Planning (ERP) systems, Materials Resource Planning (MRP) and proprietary systems • statistical process control systems, including six sigma and three sigma • Just in Time (JIT), kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts • standard procedures • current reality tree Competitive systems and practices should be interpreted so as to take into account: • the stage of implementation of competitive systems

	and practices - the size of the enterprise - the work organisation, culture, regulatory environment and the industry sector
Cost components	Cost components include: - fixed and variable costs, such as power/energy, materials, plant and equipment, production or process time, including impact on salary and wages - office expenses, such as telephone - government taxes and charges
Process	Process may include: a production, maintenance, logistics, office or other support process in an organisation
Overall cost	Overall cost may include: - the assessment of negative and positive financial implications - negative long-term issues, such as occupational health and safety (OHS), environmental and regulatory issues

Unit Sector(s)

Unit sector

Competitive systems and practices

Custom Content Section

Not applicable.

MSS402040A Apply 5S procedures

Modification History

New unit, superseding MSACMT240A Apply 5S procedures in a manufacturing environment
- Equivalent

Unit Descriptor

This unit of competency covers the skills and knowledge required by an employee to apply 5S procedures to their own job and work area. The unit assumes the employee has a particular job and an allocated work area and that processes in the work area are known by the individual.

Application of the Unit

This unit applies to an individual in an organisation who works in an operational position as part of production, maintenance, logistics, and so on. The unit can also apply to individuals in other organisations who have a discrete role and responsibility for individually managed processes. For employees in an office, the specific office-related unit *MSS402041A Apply 5S in an office* should be selected.

This unit applies where an organisation has decided to embark on a competitive systems and practices strategy and as part of this has adopted the philosophy of 5S as one of the tools to improve performance. The employee needs to apply 5S to their job and work area and maintain the housekeeping and other standards set by 5S.

This unit requires the application of skills associated with planning and organising, problem solving and self-management, in order to identify and implement 5S housekeeping practices.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1	Sort needed items from unneeded	1.1	Identify all items in the work area
		1.2	Sort items to achieve deliverables and value expected by downstream and final customers
		1.3	Sort items required for regulatory or other required purposes
		1.4	Place any non-essential item in a appropriate place other than the workplace
		1.5	Regularly check that only essential items are in the work area
2	Set the workplace in order	2.1	Identify the best location for each essential item
		2.2	Place each essential item in its assigned location
		2.3	After use immediately return each essential item to its assigned location
		2.4	Regularly check that each essential item is in its assigned location
3	Shine the work area	3.1	Keep the work area clean and tidy at all times
		3.2	Conduct regular housekeeping activities during shift
		3.3	Ensure the work area is neat, clean and tidy at both beginning and end of shift

4	Standardise activities	4.1	Follow procedures
		4.2	Follow checklists for activities, where available
		4.3	Keep the work area to specified standard
5	Sustain the 5S system	5.1	Clean up after completion of job and before commencing next job or end of shift
		5.2	Identify situations where compliance to standards is unlikely and take actions specified in procedures
		5.3	Inspect work area regularly for compliance to specified standard
		5.4	Recommend improvements to lift the level of compliance in the workplace

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- communicating with others to clarify issues during 5S implementation, communicate results and contribute suggestions for improvement
- visualising operations in terms of flow and contribution to customer outcomes
- planning own tasks in implementation of 5S
- implementing 5S in own work area according to instructions
- identifying waste (muda)
- prioritising activities and items
- reading and interpreting documents describing procedures
- recording activities and results against templates and other prescribed formats
- working with others
- solving problems

Required knowledge

Required knowledge includes:

- operations and processes relevant to own job
- meaning and application of 5S steps to own job and work area
- principles of efficient workplace organisation
- purposes of 5S
- methods of making/recommending improvements

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	A person who demonstrates competency in this unit must be able to provide evidence of the ability to: • identify own tasks and responsibilities and relate them to organisation and customer requirements • identify and explain the stages of 5S • implement 5S in own work area • identify waste (muda) in the work area.
Context of and specific resources for assessment	Assessment of performance must be undertaken in a workplace using or implementing one or more competitive systems and practices. Access may be required to: • workplace procedures and plans relevant to work area • specifications and documentation relating to planned, currently being implemented, or implemented changes to work processes and procedures relevant to the assessee • documentation and information in relation to production, waste, overheads and hazard control/management • reports from supervisors/managers • case studies and scenarios to assess responses to contingencies.
Method of assessment	A holistic approach should be taken to the assessment. Competence in this unit may be assessed by using a combination of the following to generate evidence: • demonstration in the workplace • workplace projects

	• suitable simulation • case studies/scenarios (particularly for assessment of contingencies, improvement scenarios, and so on) • targeted questioning • reports from supervisors, peers and colleagues (third-party reports) • portfolio of evidence. In all cases it is expected that practical assessment will be combined with targeted questioning to assess underpinning knowledge. Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.
Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the candidate and the work being performed.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Competitive systems and practices	Competitive systems and practices may include, but are not limited to: • lean operations • agile operations • preventative and predictive maintenance approaches • monitoring and data gathering systems, such as Systems Control and Data Acquisition (SCADA) software, Enterprise Resource Planning (ERP) systems, Materials Resource Planning (MRP) and proprietary systems • statistical process control systems, including six sigma and three sigma • Just in Time (JIT), kanban and other pull-related operations control systems

	• supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts • standard procedures • current reality tree Competitive systems and practices should be interpreted so as to take into account: • the stage of implementation of competitive systems and practices • the size of the enterprise • the work organisation, culture, regulatory environment and the industry sector
5S	5S is a system of work organisation originally developed in Japan based around housekeeping principles. A close translation of the five stages in the housekeeping approach is: • sort • set in order • shine • standardise • sustain
Sort	Sort involves keeping only what is absolutely necessary for the processes in the work area. Sort includes: • clearing the work area of all non-essential equipment and materials Non-essential items are those not required to either produce product, conduct process or operations, or make required adjustments to equipment during process or operations
Set in order	Set in order includes: • assigning required equipment and materials appropriate locations in the work area

Shine	Shine includes: keeping the work area clean at all times. This should be carried out to a regular daily schedule against allowed time and, on most occasions, at the end of a job
Standardise	Standardising includes: - activities that help maintain the order and the housekeeping standards - using procedures and checklists developed from a procedure
Sustain	Sustain includes: - making sure that daily activities are completed every day regardless of circumstance - cleaning up after a job - undertaking inspections, including: - informal inspections carried out often, at least weekly - formal inspections carried out at least monthly - generating continuous improvement actions from daily activities - following up specific actions to generate continuous improvement
Items in work area	Items in work area may include: - tools - jigs/fixtures - materials/components - plant and equipment - manuals - personal items (e.g. bags, lunch boxes and posters) - safety equipment and personal protective equipment - other items which happen to be in the work area
Procedures	Procedures may include: - work instructions - standard operating procedures - formulas/recipes - batch sheets - temporary instructions and similar instructions provided for the operation of the plant - good operating practice as may be defined by industry codes of practice (e.g. good manufacturing

	practice (GMP) and responsible care) and government regulations Procedures may be: • written, verbal, computer based or in some other format

Unit Sector(s)

Unit sector

Competitive systems and practices

Custom Content Section

Not applicable.

MSS402080A Undertake root cause analysis

Modification History

New unit, superseding MSACMT280A Undertake root cause analysis - Equivalent

Unit Descriptor

This unit of competency covers the skills and knowledge required to undertake root cause analysis (RCA) by any person. This will often be undertaken by people working in a team. This unit also covers the competencies needed by operators to contribute to an advanced maintenance strategy using RCA coupled with diagrams and charts.

Application of the Unit

This unit applies to individuals working in an organisation which is applying competitive systems and practices strategies. The unit applies to the formal problem solving to root cause that the individual must undertake in their own work area or where the individual contributes to problem solving to root cause as part of a team.

This unit requires an ability to seek and apply information from a variety of sources in order to inform RCAs. Initiative and enterprise is also required to identify quick fix and permanent solutions to problems.

Where training in a wider range of problem solving techniques and tools is required the unit MSAPMSUP390A Use structured problem solving tools should be selected.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the Performance criteria describe the performance needed to

essential outcomes of a unit of competency.

demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1	Recognise problems	1.1	Identify features or occurrences indicative of a problem
		1.2	Use appropriate tools, techniques and charts to define the problem
2	Implement quick fix	2.1	Recommend a quick fix within the scope of competency and authority
		2.2	Use technology or processes relevant to the problem to implement quick fix
3	Determine root cause	3.1	Identify a range of possible causes
		3.2	Gather data and other information to eliminate or confirm possible causes
		3.3	Use available data and information to link causes and effects
		3.4	Seek assistance, as required
		3.5	Identify root cause
4	Develop permanent solution	4.1	Identify a range of methods to eliminate the root cause or break the cause tree
		4.2	Select the most appropriate solution
		4.3	Liaise with relevant people
		4.4	Recommend or implement solution within the limits of competency and authority

4.5 Monitor impact of solution and make further recommendations, as required

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- cooperating and working with others on problem solving
- assessing and recording information from a variety of sources
- defining potential problems factually, including:
 - location and extent of problem or incident
 - sequence of events where relevant
 - extent of deviation from normal operation or performance
- analysing potential problems across a range of varied activities and knowledge applications
- reading and constructing simple charts, such as cause and effect diagrams

Required knowledge

Required knowledge includes:

- RCA methodology, including difference between quick fixes and root cause elimination or breaking of causal tree
- principles and normal operation of equipment, plant and processes in own work area sufficient to undertake a RCA and propose solutions
- common variances to normal performance that are indicators of a problem
- use of relevant analysis tools (e.g. cause/effect diagrams, Pareto charts and 5 Whys)
- operations in own work area

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and	A person who demonstrates competency in this unit must

evidence required to demonstrate competency in this unit	be able to provide evidence of the ability to: • undertake problem identification • use appropriate processes to achieve root cause identification • prioritise solutions • recommend solutions and implementation procedures to problems within own area and range of technical skills and knowledge • evaluate implementation of solutions.
Context of and specific resources for assessment	Assessment of performance must be undertaken in a workplace using or implementing one or more competitive systems and practices. Access may be required to: • workplace procedures and plans relevant to work area • specifications and documentation relating to planned, currently being implemented, or implemented changes to work processes and procedures relevant to the assessee • documentation and information in relation to production, waste, overheads and hazard control/management • reports from supervisors/managers • case studies and scenarios to assess response to contingencies.
Method of assessment	A holistic approach should be taken to the assessment. Competence in this unit may be assessed by using a combination of the following to generate evidence: • demonstration in the workplace • workplace projects • suitable simulation • case studies/scenarios (particularly for assessment of contingencies, improvement scenarios, and so on) • targeted questioning • reports from supervisors, peers and colleagues (third-party reports) • portfolio of evidence. In all cases it is expected that practical assessment will be combined with targeted questioning to assess underpinning knowledge. Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and

	disability.
Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the candidate and the work being performed.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Competitive systems and practices	Competitive systems and practices may include, but are not limited to: • lean operations • agile operations • preventative and predictive maintenance approaches • monitoring and data gathering systems, such as Systems Control and Data Acquisition (SCADA) software, Enterprise Resource Planning (ERP) systems, Materials Resource Planning (MRP) and proprietary systems • statistical process control systems, including six sigma and three sigma • Just in Time (JIT), kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts • standard procedures • current reality tree

	Competitive systems and practices should be interpreted so as to take into account: - the stage of implementation of competitive systems and practices - the size of the enterprise - the work organisation, culture, regulatory environment and the industry sector
Features or occurrences indicative of a problem	Examples of features or occurrences indicating problems include: - variation to normal plant or equipment operation - unplanned or non-conforming process or operations outcomes - out of specification products - excess scrap - accidents and emergencies - regulatory breaches - customer returns and complaints - reduction or loss of sales
Root cause	There are many possible causes of any problem. The root cause contrasts with other possible causes of a problem which when eliminated have no impact or only ameliorate the problem. Elimination of the root cause permanently eliminates the problem. There should only be one root cause for any problem and so the analysis should continue until this one cause is found.
Cause tree	The series of causes is referred to as the cause tree. Not all root causes are accessible and able to be eliminated. Breaking the cause tree is such a way that the problem cannot recur is an acceptable alternative. Not all situations can wait for the RCA and eventual elimination of the root cause as there may be serious current impacts. The quick fix will control these immediate impacts, but does not eliminate the root cause.
Quick fix	A quick fix is not a short cut or side step for a permanent solution to the root cause. It is a necessary step designed to control the immediate impacts of a problem, for example, to prevent ongoing errors or to ameliorate damage.
Appropriate techniques/charts	Appropriate techniques/charts may include: - control charts - Pareto charts

	• run charts • flow charts • cause and effect diagrams • tree diagrams • 5 Whys analysis

Unit Sector(s)

Unit sector

Competitive systems and practices

Custom Content Section

Not applicable.

MSS403010A Facilitate change in an organisation implementing competitive systems and practices

Modification History

New unit superseding MSACMC410A Lead change in a manufacturing environment - Equivalent

Unit Descriptor

This unit of competency covers the skills and knowledge required by individuals responsible for facilitating change processes in an organisation implementing competitive operational practices.

Application of the Unit

This unit applies to people who facilitate the change process resulting from implementing one or more competitive systems or practices. This implementation may also be associated with other changes, such as the introduction of new products, processes or equipment. The unit will usually apply to people whose responsibility is at the team, area or section level rather than the whole organisation. The responsibility may be formally designated or be informal, as in mentoring and assisting fellow employees.

This unit assumes that consultation and agreement on the implementation of the competitive systems and practices and other associated changes has already occurred and the nature and extent of the change has been agreed.

This unit does not cover the negotiation of change in a formal industrial relations sense but does cover the skills needed to identify real or potential change implementation issues, including those that may need to be referred to formal consultation and/or dispute settlement procedures.

This unit has a strong emphasis on planning, encouraging and facilitating in a changing environment within the organisation, including using appropriate communication, teamwork, problem solving, initiative and self-management.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1	Define nature and impact of change for designated area and processes	1.1	Identify the organisation's aims and objectives for the competitive systems and practices techniques related to the change process
		1.2	Identify opportunities for implementation of change within work area
		1.3	Determine impacts of change for work area, including potential benefits and impacts on own work and work of fellow employees
2	Identify key performance indicators (KPIs)	2.1	Liaise, where required, with managers, engineers and other staff responsible for designing and/or implementing change
		2.2	Identify KPIs for own work responsibility and that of the work area
		2.3	Communicate KPIs to fellow employees
		2.4	Check that data collection and processing are appropriate for KPIs
		2.5	Raise and resolve issues related to KPIs with relevant personnel

3	Liaise with key stakeholders	3.1	Identify key stakeholders impacted by the change
		3.2	Communicate with key stakeholders within scope of authority
		3.3	Identify and address issues and concerns of each stakeholder if within scope of authority
		3.4	Develop and/or locate information required to address key concerns
		3.5	Refer issues and concerns outside of scope of authority to appropriate personnel
4	Develop a strategy to help implement change	4.1	Identify or develop a work plan for implementing change
		4.2	Make information required to support change available to team members
		4.3	Communicate/circulate draft work plan to other employees in work area, supervisors, technical experts and other appropriate personnel for comment
		4.4	Assess suggested changes and incorporate into work plan, where appropriate
5	Implement change	5.1	Obtain authorisation to commence change implementation in accordance with organisation procedures
		5.2	Implement change in accordance with work plan and organisational occupational health and safety (OHS) and consultation procedures
6	Monitor implementation of change	6.1	Maintain open communication channels with all stakeholders during implementation
		6.2	Monitor KPIs during implementation
		6.3	Encourage and facilitate improvement suggestions of team members
		6.4	Identify areas requiring improvement in change

implementation

6.5 Make improvements to implementation according to organisation procedures

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- identifying the competitive operational practices being implemented in the organisation, including:
 - Just in Time (JIT) and kanban systems
 - preventative maintenance
 - 5S housekeeping
 - continuous improvement processes (e.g. kaizen)
 - waste (muda) elimination
 - formal problem solving procedures (e.g. root cause analysis (RCA))
- identifying other products, processes or equipment changes being implemented within area of responsibility
- identifying the work and culture changes required for effective implementation of the competitive systems and practices being implemented and other products, processes or equipment changes
- identifying organisation KPIs and contextualise for area of responsibility to determine successful change implementation
- planning strategies for change implementation, including:
 - required communication with others
 - negotiations if any required with internal and external suppliers, customers and delegates
 - analysis of any skill gaps in self and others
 - required training
 - data collection
 - work organisation and procedure changes
 - risk identification and contingency measures
- monitoring performance against KPIs and taking appropriate corrective action in the event of a non-conformance
- identifying and communicating with sources of assistance if difficulty is experienced with changes

Required knowledge

Required knowledge includes:

- features of common competitive operational practices, including:
 - JIT and kanban systems
 - preventative maintenance
 - 5S housekeeping
 - continuous improvement processes (e.g. kaizen)
 - waste (muda) elimination
 - formal problem solving procedures (e.g. RCA)
- health, safety and environment (HSE) principles and requirements for area of responsibility
- change implementation contacts and procedures relevant to work area
- employee assistance mechanisms in the organisation
- processes to develop work plans, including consideration of timetable, KPIs, training needs, OHS implications, contingency plans and responsibilities (the work plan must be capable of being coherently communicated to others)

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	A person who demonstrates competency in this unit must be able to provide evidence of the ability to: • identify the competitive systems and practices used in their own work • identify changes to their own work flowing from the implementation of the relevant competitive systems and practices • implement changes • know when and how to seek assistance with work changes • make suggestions for improvements.
Context of and specific resources for assessment	Assessment of performance must be undertaken in a workplace using or implementing one or more competitive systems and practices. Access may be required to: • workplace procedures and plans relevant to work area • specifications and documentation relating to planned,

	currently being implemented, or implemented changes to work processes and procedures relevant to the assessee • documentation and information in relation to production, waste, overheads and hazard control/management • reports from supervisors/managers • case studies and scenarios to assess responses to contingencies.
Method of assessment	A holistic approach should be taken to the assessment. Competence in this unit may be assessed by using some combination of the following to generate evidence: • demonstration in the workplace • workplace projects • suitable simulation • case studies/scenarios (particularly for assessment of contingencies, improvement scenarios, and so on) • targeted questioning • reports from supervisors, peers and colleagues (third-party reports) • portfolio of evidence. In all cases it is expected that practical assessment will be combined with targeted questioning to assess underpinning knowledge. Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.
Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the candidate and the work being performed.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of

the item, and local industry and regional contexts) may also be included.

Competitive systems and practices	Competitive systems and practices may include, but are not limited to: • lean operations • agile operations • preventative and predictive maintenance approaches • monitoring and data gathering systems, such as Systems Control and Data Acquisition (SCADA) software, Enterprise Resource Planning (ERP) systems, Materials Resource Planning (MRP) and proprietary systems • statistical process control systems, including six sigma and three sigma • JIT, kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts • standard procedures • current reality tree Competitive systems and practices should be interpreted so as to take into account: • the stage of implementation of competitive systems and practices • the size of the enterprise • the work organisation, culture, regulatory environment and the industry sector
Team	Team may include: • work teams from all sections of an organisation, including production or other operational areas, maintenance, technical, administration/finance, and sales/marketing
Change	The philosophy of continual improvement is that every

	process can and should be continually evaluated and improved in terms of time required, resources used, resultant quality, and other aspects relevant to the process. Superimposed on this is the concept of breakthrough change when a large change/improvement is made which can shift the direction or operation of the organisation. Once such breakthrough change is the introduction of competitive operational practices.
Work plan for change	The work plan for change covers the designated work area and may include, depending on the organisation and work area processes: • timetable • KPIs • training needs • OHS implications • contingency plans • responsibilities with team members and senior managers, engineers and other staff responsible for designing and/or implementing change
Issues and concerns	Issues and concerns may be communicated formally and informally and may include: • individual and group concerns • those expressed by and through industrial processes
Gathering and monitoring performance data	Performance data may be gathered and monitored: • manually by individual employees through charts, tally sheets or keypad/board entry • automatically through software, such as SCADA software, ERP systems, MRP and proprietary systems

Unit Sector(s)

Unit sector

Competitive systems and practices

Custom Content Section

Not applicable.

MSS403040A Facilitate and improve implementation of 5S

Modification History

New unit, superseding MSACMT440A Lead 5S in a manufacturing environment - Not equivalent

Unit Descriptor

This unit of competency covers the skills and knowledge required to facilitate the implementation and improvement of the 5S by self and others in a team or work area.

Application of the Unit

This unit applies to individuals who facilitate 5S in a team or work area, including implementation, monitoring and improvement. The facilitation may be undertaken by formally designated supervisory staff, such as team leaders or other individuals in a competitive systems and practices implementation role, who need to provide support and encouragement to others to facilitate the achievement of 5S outcomes in the workplace.

This unit requires the application of skills associated with communication, teamwork, problem solving, initiative and enterprise, planning and organising, and self-management in order to provide leadership in a 5S environment. This unit has a strong emphasis on planning and change management, but also requires an ability to learn from experience and feed new information back into strategies to improve performance.

For planning, implementing and leading the application of 5S in an office environment see unit *MSS403039A Facilitate and improve 5S in an office*.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1	Facilitate the set-up of 5S	1.1	Assist others to determine what are necessary and unnecessary items in the work area
		1.2	Assist others to determine optimum assigned location for all necessary items
		1.3	Liaise with relevant production and occupational health and safety (OHS) personnel in determining optimum locations
		1.4	Assist others to determine optimum location for unnecessary items
		1.5	Assist others to determine 5S schedule
		1.6	Ensure procedures reflect 5S practices
		1.7	Assist others to achieve the required level of skill
2	Facilitate the implementation of 5S	2.1	Ensure procedures reflect 5S practices
		2.2	Assess skill base of team or work group members in 5S and arrange for any required training
		2.3	Ensure that any damage and/or safety risks reported by the team or work group are addressed through correct mechanisms
3	Monitor 5S	3.1	Check work area for 5S implementation as part of normal routine

	3.2	Identify non-conformances
	3.3	Negotiate solutions to non-conformances
4	Improve 5S	
	4.1	Work with others to find areas for improvement
	4.2	Assist others to develop improvement solutions
	4.3	Facilitate the availability of resources required for the improvement solution
	4.4	Facilitate the implementation of the improvement solution

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- communicating with other employees and managers to engender commitment to achieving 5S outcomes, conduct formal and informal meetings and to explain 5S and related concepts
- facilitating team or work area goals, activities and communications and accessing resources
- visualising normal operational procedures in terms of flow and contribution to customer outcomes
- planning and prioritising activities
- problem solving to determine potential improvements to the 5S system
- reading and interpreting the application of operating procedures for jobs within team or target work area
- analysing work practices, procedures and 5S principles to facilitate setting up the 5S system and to identify improvements
- identifying gaps in skills and/or knowledge and options to address them

Required knowledge

Required knowledge includes:

- principles and purpose of 5S
- methods of identifying waste in the work area, such as:
 - waste walk
 - document tagging
 - tracking/log sheets
 - spaghetti diagrams
- existing information technology and enterprise resource systems (e.g. Systems Control and Data Acquisition (SCADA) software, Enterprise Resource Planning (ERP) systems, Materials Resource Planning (MRP) and proprietary systems
- organisational policies, plans and procedures
- processes for identifying and addressing skill gaps
- ways of encouraging team members to find and suggest areas for improvement
- methods of identifying and evaluating options and making/recommending improvements
- methods of accessing required resources
- OHS requirements relevant to team and work area

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	A person who demonstrates competency in this unit must be able to provide evidence of the ability to: • identify the scope of the services and/or functions supplied to and by the team or work area and the deliverables expected by customers, including the ultimate customer • facilitate a systematic approach to implementing 5S • lead and motivate others in achieving 5S outcomes and making improvements to the 5S systems • set up systems for monitoring and improving 5S implementation • manage non-conformances in implementation of 5S.
Context of and specific resources for assessment	Assessment of performance must be undertaken in a workplace using or implementing one or more competitive systems and practices. Access may be required to:

	• workplace procedures and plans relevant to work area • specifications and documentation relating to planned, currently being implemented, or implemented changes to work processes and procedures relevant to the assessee • documentation and information in relation to production, waste, overheads and hazard control/management • reports from supervisors/managers • case studies and scenarios to assess responses to contingencies.
Method of assessment	A holistic approach should be taken to the assessment. Competence in this unit may be assessed by using a combination of the following to generate evidence: • demonstration in the workplace • workplace projects • suitable simulation • case studies/scenarios (particularly for assessment of contingencies, improvement scenarios, and so on) • targeted questioning • reports from supervisors, peers and colleagues (third-party reports) • portfolio of evidence. In all cases it is expected that practical assessment will be combined with targeted questioning to assess underpinning knowledge. Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.
Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the candidate and the work being performed.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with

training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Competitive systems and practices	Competitive systems and practices may include, but are not limited to: • lean operations • agile operations • preventative and predictive maintenance approaches • monitoring and data gathering systems, such as SCADA software, ERP systems MRP and proprietary systems • statistical process control systems, including six sigma and three sigma • Just in Time (JIT), kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts • standard procedures • current reality tree Competitive systems and practices should be interpreted so as to take into account: • the stage of implementation of competitive systems and practices • the size of the enterprise • the work organisation, culture, regulatory environment and the industry sector
Procedures	Procedures may include: • work instructions • standard operating procedures • formulas/recipes • batch sheets • temporary instructions and similar instructions provided for the smooth running of the plant

	• good operating practice as may be defined by industry codes of practice (e.g. good manufacturing practice (GMP) and Responsible Care) • government regulations Procedures may be: • written, verbal, computer-based or in some other format
5S	5S is a system of work organisation originally developed in Japan based around a close translation of the five stages in the housekeeping approach is: • sort • set in order • shine • standardise • sustain
Sort	Sort involves keeping only what is absolutely necessary for the work processes that comprise the job and includes: • clearing the work area of all non-essential items Non-essential items are items not required to either produce product, conduct process or operations or make required adjustments to equipment during process or operations
Set in order	Set in order includes: • assigning required equipment and materials appropriate locations in the work area
Shine	Shine includes: • keeping the work area clean at all times. This should be carried out to a regular daily schedule against allowed time, usually at the end of the day or of a particular process Cleaning includes: • noting any signs of wear, damage, leakage, safety risks or other issues that require immediate attention
Standardise	Standardising includes: • activities that help maintain the order and the housekeeping standards • using procedures and checklists developed from a procedure

Sustain	Sustain includes: • making sure that daily activities are completed every day regardless of circumstance • undertaking inspections, including: • informal inspections that should be carried out often, at least weekly • generating continuous improvement actions from daily activities • formal inspections that should be carried out at least monthly
Items in work area	Items in work area may include: • tools • jigs/fixtures • materials/components • plant and equipment • manuals • personal items (e.g. bags, lunch boxes and posters) • safety equipment and personal protective equipment • other items which happen to be in the work area
Team	The term team is used to apply to all individuals in the target work area who are involved in the implementation of 5S. The team may or may not be a formally designated team working to a team leader
Work area	The work area includes: • all areas where aspects of the job are performed and that are under the direct control of the employee. In a team environment 5S should be applied to all work areas under the control of the team
Target work area	The target work area may be identified as a physical and/or virtual work space: • used by a person, a team or a cross-functional group • common to part/s of a process or value stream (already defined) • shared by people who undertake a defined procedure or set of procedures • needed to support a particular function
Appropriate place	Appropriate places may include areas designated for: • recycling • rubbish removal

	• staff room/lunch room/kitchen • storage • holding area until status is confirmed
Optimum assigned location	The optimum assigned location may include: • making changes to the layout of furniture, equipment and personnel in order to facilitate the smooth and continuous flow of work through process steps taking into account OHS considerations
Non-conformance	Non-conformance includes: • incorrect or incomplete application of 5S procedures, including any daily tasks, scheduled inspections and continuous improvement procedures

Unit Sector(s)

Unit sector

Competitive systems and practices

Custom Content Section

Not applicable.

MSS405021A Develop a Just in Time system

Modification History

New unit, superseding MSACMT621A Develop a Just in Time (JIT) system* - Not equivalent

* Prerequisite MSACMC410A Lead change in a manufacturing environment - removed

Unit Descriptor

Not applicable.

Application of the Unit

This unit applies to a person responsible for planning and implementing a JIT system. It includes consulting with employees, suppliers and customers regarding the change. This may require identification of training and other employee support as well as identifying possible logistical support.

The unit includes kanban-based JIT systems but also applies to other sectors and systems where a traditional kanban-type JIT may not be suitable through the unit's coverage of JIT principles.

This unit requires the application of skills associated with communication in gathering, analysing and applying information, consulting with stakeholders, problem solving, and demonstrating initiative and enterprise. This unit also requires aspects of self-management and learning to ensure feedback and new learning is integrated into the JIT design.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1	Design the JIT system/system improvements	1.1	Identify value chain members
		1.2	Consult with internal and external value chain members
		1.3	Identify current storage/inventory in value chain
		1.4	Determine flow authorisation indicators
		1.5	Determine minimum and maximum operations rate
		1.6	Determine lead time for product or service
		1.7	Determine number of units per kanban
		1.8	Draft workable procedures to implement JIT
2	Implement the JIT system/improvements	2.1	Consult with key internal stakeholders to develop solutions to JIT issues
		2.2	Ensure all stakeholders have required JIT-related skills and related issues have been resolved
		2.3	Liaise with key external members of the value chain to develop solutions to JIT issues
		2.4	Develop implementation plan for JIT
		2.5	Determine key measures of JIT
3	Monitor the JIT	3.1	Monitor key measures of JIT

system	3.2	Regularly liaise with key stakeholders seeking areas for improvement
	3.3	Identify areas in need of improvement

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- communicating at all levels in the organisation and value stream and to audiences of different levels of literacy and numeracy
- undertaking self-directed problem solving and decision-making on issues of a broad and/or highly specialised nature and in a wide variety of contexts
- analysing equipment, operations and value stream and determining best flow authorisation strategy, including:
 - form of kanban or flow authorisation indicator
 - integration with operations and other competitive systems and practices tools and techniques
 - key measures and monitoring strategy for JIT system
 - procedures to be adopted in the event of a non-conformance
- problem solving JIT issues and non-conformances to root cause

Required knowledge

Required knowledge includes:

- needs of internal and external value chain members
- principles of JIT, including:
 - demand pull
 - flow authorisation
 - kanban
 - capability rate
 - monitoring
 - non-conformance procedures
- reasons for delays/storages/inventories in the value stream and methods of reducing/eliminating them
- methods of identifying skill gaps and methods of filling skill gaps

- key business objectives associated with implementing JIT
- principles of the operational processes relevant to the JIT implementation
- production data generated by the process and its application to JIT

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	A person who demonstrates competency in this unit must be able to provide evidence of their ability to: • develop a complete JIT system, including: • implementation strategy • key measures • training and support strategy for employees and value chain members • procedures in the event of a non-conformance • communicate and negotiate complex issues to a wide variety of individuals • supervise JIT implementation and suggest improvements.
Context of and specific resources for assessment	Assessment of performance must be undertaken in a workplace using or implementing one or more competitive systems and practices. Access may be required to: • workplace procedures and plans relevant to work area • specifications and documentation relating to planned, currently being implemented, or implemented changes to work processes and procedures relevant to the assessee • documentation and information in relation to production, waste, overheads and hazard control/management • reports from supervisors/managers • case studies and scenarios to assess responses to contingencies.
Method of assessment	A holistic approach should be taken to the assessment. Competence in this unit may be assessed by using a

	combination of the following to generate evidence: • demonstration in the workplace • workplace projects • suitable simulation • case studies/scenarios (particularly for assessment of contingencies, improvement scenarios, and so on) • targeted questioning • reports from supervisors, peers and colleagues (third-party reports) • portfolio of evidence. In all cases it is expected that practical assessment will be combined with targeted questioning to assess underpinning knowledge. Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.
Guidance information for assessment	This unit may be assessed concurrently with: • MSS405002A Analyse and map a value stream, and/or • MSS405050A Determine and improve process capability. This unit is related to: • MSS402021A Apply Just in Time procedures • MSS403021A Facilitate a Just in Time system which cover the lowest and intermediate skill levels in competitive systems and practices respectively. Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the candidate and the work being performed.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of

the item, and local industry and regional contexts) may also be included.

Competitive systems and practices	Competitive systems and practices may include, but are not limited to: • lean operations • agile operations • preventative and predictive maintenance approaches • monitoring and data gathering systems, such as Systems Control and Data Acquisition (SCADA) software, Enterprise Resource Planning (ERP) systems, Materials Resource Planning (MRP) and proprietary systems • statistical process control systems, including six sigma and three sigma • JIT, kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts • standard procedures • current reality tree Competitive systems and practices should be interpreted so as to take into account: • the stage of implementation of competitive systems and practices • the size of the enterprise • the work organisation, culture, regulatory environment and the industry sector
JIT	JIT is a production scheduling concept that calls for any item or service needed at a production operation, whether raw material, components, fuel, power, finished item, or anything else in between raw material and delivery to the final customer, to be produced and available precisely when needed, neither a moment earlier nor a moment later. JIT principles may also be applied to non-product based manufacturing operations (e.g. where services

	must be delivered on demand, such as transport)
Kanban	Kanban is a signal to authorise production or movement of an item to the next stage of production or operations. It is often a physical item for example a card, bin or sheet. When fully implemented, kanban operates according to the following rules: • all production and movement of parts, material or other necessary items takes place only as required by a downstream operation • the specific tool which authorises production or movement is called a kanban Kanban is typically applied to batch type operations and the production is measured in units produced. In continuous operations organisations, production is measured in terms of production rate (e.g. kg/h, tonne/day) and rate is increased/decreased according to the flow authorisation which may be a kanban (e.g. ticket or order from a supplier) or may be a SCADA signal from a remote facility (e.g. customer tank) saying that resupply is required or similar. In service operations a physical kanban may not be used – see flow authorisation indicator
SCADA	SCADA refers to: • a number of systems which automatically collect critical process data, perform required mathematical manipulations on it and then make control decisions and/or give required information personnel for action
Value stream	The value stream begins with the customer and includes all actions (both value-adding and non-value added) by both internal sections/departments and external organisations to meet a customer requirement. Depending on the operations and the customer requirement stages where value stream actions may occur include: • sales outlet/representative • information gathering, data analysis and research • product design • raw material sourcing • intermediate processing • final assembler/ collation/preparation • support services (e.g. accounting, finance and legal) • storage and delivery to customer

	• after market support
Flow authorisation indicator	Flow authorisation indicator may include: • kanban bin, ticket or similar • other indicator of demand pull
Pull system	Pull system includes: • an operations planning system which makes to demand, rather than for stock or to a forecast
Cards/bins	Cards/bins include: • the indicators used for production authorisation and may be physical cards or bins or some other suitable indicator
Procedures	Procedures may include: • work instructions • standard operating procedures • formulas/recipes • batch sheets • temporary instructions and similar instructions provided for the smooth running of the plant • good operating practice as may be defined by industry codes of practice (e.g. good manufacturing practice (GMP) and responsible care) • government regulations Procedures may be: • written, verbal, computer-based or in some other format
Key measures	Key measures may include: • inventory levels • lead time • in full, on time and in specification (IFOTIS) delivery • productivity/production rate • other measures of pull through the value chain • quality

Unit Sector(s)

Unit sector

Competitive systems and practices

Custom Content Section

Not applicable.

SIRXCCS006A Maintain business to business relationships

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to develop and maintain enduring relationships with business customers, focusing on identification of customer needs.

Application of the Unit

Application of the unit	This unit requires sales team members to identify key customer contacts, and service-specific customer needs and confirm trading terms with customer contacts to build and maintain sustainable relationships with business customers.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	Nil

Employability Skills Information

Employability skills The required outcomes described in this unit contain applicable facets of employability skills. The Employability Skills Summary of the qualification in which this unit is packaged will assist in identifying employability skills requirements.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Develop techniques to maintain close contact with business customers.	1.1 Confirm <i>relevant contact personnel</i> at each business or account customer. 1.2 Participate and contribute to <i>team</i> efforts to service business customers. 1.3 Build external relationships to improve supply chain efficiency, including product or service supply, account management, product management, supply arrangements, distribution systems, information and communication. 1.4 Maintain business customer contact consistent with <i>business policy and procedures</i>.
2 Identify business customer needs.	2.1 Confirm means to <i>identify</i> business customer needs. 2.2 Consult relevant customer contacts to review business needs. 2.3 Analyse current business and <i>promotional activities</i> and

ELEMENT**PERFORMANCE CRITERIA**

determine future directions.

2.4 Outline and confirm **trading terms** for specific customers.

2.5 Confirm pricing policy and procedures.

2.6 Process business reviews using latest forecasts of current and future trends.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

The following skills must be assessed as part of this unit:

- identify and maintain key contact personnel at customer businesses
- contribute to team service to specific customers
- confirm trading terms, pricing policies and other relevant procedures to customers
- process business forecasts for implementation
- interpersonal skills
- review business needs and basic forecasts
- collect and organise information
- effective use of technology
- literacy skills to read, analyse and interpret a range of business policy and procedures documents and research information
- flexibility when communicating within teams, and responding to customers.

The following knowledge must be assessed as part of this unit:

- prioritising work schedule
- business policy and procedures for building relationships with business customers
- pricing policies
- trading terms
- information sources on product and supply arrangements for customers
- OHS aspects of job
- relevant consumer law, commercial law and legislation.

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, the range statement and the Assessment Guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- builds sustainable relationships with business customers that deliver agreed business outcomes
- identifies key contact personnel for businesses with a given territory or customer account
- describes and utilises a range of means to accurately identify specific needs of business customers
- confirms trading terms for customers according to business policy and procedures

Context of and specific resources for assessment

Assessment must ensure access to:

- a retail or wholesale work environment
- relevant sources of product information
- relevant documentation, such as policy and procedures manuals
- forecasts for current and future market trends
- a range of business customers with different requirements
- an appropriate range of products or services
- customer information.

Methods of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of performance in the workplace
- third-party reports from a supervisor
- customer feedback
- written or verbal questioning to assess knowledge and understanding.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

EVIDENCE GUIDE

Assessing employability skills

Employability skills are integral to effective performance in the workplace and are broadly consistent across industry sectors. How these skills are applied varies between occupations and qualifications due to the different work functions and contexts.

Employability skills embedded in this unit should be assessed holistically in the context of the job role and with other relevant units that make up the skill set or qualification.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the performance criteria is detailed below.

Relevant contact personnel may include:

- new or repeat contacts
- internal and external contacts
- people from a range of social, cultural and ethnic backgrounds and with varying physical and mental abilities.

Team members may include:

- full-time, part-time, casual or contract staff
- people with varying degrees of language and literacy
- people from a range of cultural, social and ethnic backgrounds
- people with a range of responsibilities and job descriptions.

Business policy and procedures in relation to:

- sale and distribution of products and services
- interaction with customers
- client relationship management
- pricing arrangements

RANGE STATEMENT

- trading terms.

Methods to **identify** business customer needs may include:

- verbal or non-verbal communication with:
 - customer contacts
 - staff
 - supervisors and management
 - suppliers
- observation
- appropriate questioning and active listening
- review of sales records.

Promotional activities may include:

- internal and external activities
- corporate or locally based activities
- dealing with advertising agencies and consultants
- advertising
- catalogues
- newspapers
- posters
- radio or TV
- suppliers
- internet
- website.

Trading terms may be influenced by:

- due diligence requirements
- value for money
- risk sharing
- market position
- planning cycles and timing
- terms and conditions agreed
- intellectual property and technology rights
- continuous improvement
- supply chain management
- infrastructural and capital outlay requirements
- organisational systems integration and compatibility.

Unit Sector(s)

Sector

Cross-Sector

Competency field

Competency field

Client and Customer Service

SIRXSL002A Advise on products and services

Modification History

The version details of this endorsed unit are in the table below. The latest information is at the top.

Release	Comments
Second Release	Editorial updates

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to apply a depth of specialist or general product knowledge and a need for experience and skill in offering advice to customers.

Application of the Unit

This unit applies to team member who develop, maintain and convey detailed and specialised product knowledge to customers and other staff in accordance with store policy and relevant legislation. Specialist sales personnel undertake this function.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

Pre-Requisites

Nil

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
1. Develop product and service knowledge.	1.1. Develop and maintain <i>product knowledge</i> according to <i>store policy</i> and <i>legislative requirements</i> . 1.2. Convey product knowledge to other <i>staff</i> as required. 1.3. Research and apply comparisons between products and services. 1.4. Demonstrate knowledge of competitors' product and service range and <i>pricing structure</i> .
2. Recommend specialised products or services.	2.1. Evaluate merchandise according to <i>customer requirements</i> . 2.2. Demonstrate features and benefits of products and services to <i>customer</i> to create a buying environment. 2.3. Apply detailed specialised knowledge of product to provide accurate advice to customers.

Required Skills and Knowledge

This section describes the essential skills and knowledge and their level, required for this unit.

Required skills

- interpersonal skills to:
 - convey product knowledge to staff
 - apply knowledge to provide advice to customers
 - handle difficult customers through clear and direct communication
 - ask questions to identify and confirm requirements
 - share information
 - use language and concepts appropriate to cultural differences
 - use and interpret non-verbal communication
- literacy skills in regard to:
 - use a range of communication and electronic equipment
 - access relevant product and service information
 - interpret product information
 - interpret store policies and procedures

- record information
- numeracy skills to:
 - estimate and calculate costs relevant to pricing products

Required knowledge

- specialised product knowledge, including:
 - warranties
 - benefits and features
 - shelf life and use-by date
 - storage requirements
 - ingredients or materials contained in product
 - product and ingredient origins
 - care and handling of products
 - corresponding or complementary products and services
 - stock availability
- store and industry manuals and documentation
- stock and merchandise range
- service range
- store policies and procedures including:
 - procedures for taking orders
 - pricing procedures, including GST requirements
- relevant legislation and statutory requirements and industry code of practice relating to the retail industry

Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- consistently applies store policies and procedures and industry codes of practice in regard to customer service and selling products and services
- develops, maintains and conveys product knowledge to customers and other staff
- applies detailed and specialised product knowledge to provide accurate advice according to the needs of the customer.

Context of and specific

Assessment must ensure access to:

resources for assessment

- a retail work environment
- a range of stock and merchandise
- relevant documentation, such as:
 - price lists
 - policy and procedures manuals
- a range of customers with different requirements
- a range of communication equipment.

Methods of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of the candidate in the workplace
- third-party reports from a supervisor
- customer feedback
- answers to questions about specific skills and knowledge
- review of portfolios of evidence and third-party workplace reports of on-the-job performance.

Guidance information for assessment

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the performance criteria is detailed below.

Product knowledge may include:

- brand options
- product features and benefits
- warranties
- safety features
- use-by dates
- handling and storage requirements
- stock availability
- price.

Product knowledge may be developed and maintained by:

- accessing the internet
- attending product launches
- attending product seminars
- discussions with staff
- accessing product information booklets and

	pamphlets.
Store policy and procedures in regard to:	• interaction with customers • selling products and services.
Legislative requirements may include:	• Trade Practices and Fair Trading Acts • tobacco laws • liquor laws • lottery legislation • industry codes of practice • WHS • sale of second-hand goods • sale of X and R rated products • trading hours • transport, storage and handling of goods.
Staff may include:	• full-time, part-time or casual • under contract • people with varying degrees of language and literacy • people from a range of cultural, social and ethnic backgrounds • people with a range of responsibilities and job descriptions.
Customer requirements may include:	• specific brand • sizing • quality • quantity • price range • usage.
Customers may include:	• new or repeat contacts • external and internal contacts • customers with routine or special requests • people from a range of social, cultural and ethnic backgrounds and with varying physical and mental abilities.
Pricing structure may include:	• sales reductions • pricing procedures, including GST requirements • mark-downs.

Unit Sector(s)

Cross-Sector

Competency field

Sales

SIRXSL201 Sell products and services

Modification History

The version details of this endorsed unit are in the table below. The latest information is at the top.

Release	Comments
First Release	This is a revised unit, based on and equivalent to SIRXSL001A Sell products and services.

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to sell products and services in a retail environment.

It involves the use of sales techniques and encompasses key selling skills, from approaching the customer to closing the sale.

It requires a basic level of product knowledge and the recognition and demonstration of verbal and non-verbal communication skills to determine customer requirements, sell the benefits of products and services, overcome objections and close sales.

Personal evaluation is used to maximise sales, according to industry codes of practice, relevant legislation and store policy.

Application of the Unit

This unit applies to frontline sales personnel.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

Pre-Requisites

Nil

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
1. Develop and apply product knowledge.	1.1. Develop product knowledge by accessing relevant sources of information and confirm with relevant staff. 1.2. Apply knowledge of the use and application of relevant products and services in interactions with customers according to store policy and legislative requirements . 1.3. Identify gaps in product knowledge and resolve by accessing relevant sources of information.
2. Approach customer.	2.1. Identify customers by name where possible. 2.2. Develop knowledge of customer buying behaviour by accessing relevant sources of information. 2.3. Determine and apply appropriate timing of customer approach according to store policy and customer behaviour. 2.4. Initiate customer contact according to store policy. 2.5. Convey a positive impression to encourage customer interest according to store policy.
3. Gather and respond to information.	3.1. Apply questioning techniques and listening skills to determine customer buying motives and requirements. 3.2. Interpret and clarify non verbal communication cues. 3.3. Direct customer to specific merchandise according to customer requirements and store policy.
4. Sell benefits.	4.1. Match customer needs to appropriate products and services. 4.2. Communicate knowledge of product features and benefits clearly to customers. 4.3. Describe product use and safety requirements to customers. 4.4. Refer customers to appropriate product specialist as required. 4.5. Answer routine customer questions about merchandise accurately and honestly or refer to senior sales staff.

5. Overcome objections.	5.1. Identify and acknowledge customer objections according to store policy. 5.2. Categorise objections into price, time and merchandise characteristics and consider solutions. 5.3. Offer solutions to customer objections according to store policy. 5.4. Apply problem solving within personal scope of responsibilities to overcome customer objections or refer to senior staff.
6. Close sale.	6.1. Monitor, identify and respond appropriately to customer buying signals. 6.2. Encourage customer to make purchase decisions. 6.3. Select and apply appropriate method of closing sale.
7. Maximise sales opportunities.	7.1. Recognise and apply opportunities for making additional sales according to store policy. 7.2. Advise customer of complementary products or services according to customer's identified need. 7.3. Review personal sales outcomes and consider strategies to maximise future sales in consultation with relevant staff.

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- communication and interpersonal skills to:
 - handle difficult customers
 - verbal and non-verbal communication skills to:
 - question, listen and observe
 - overcome objections and close sale
- literacy and numeracy skills to:
 - handle payments for goods
 - read product information
 - read store policies and procedures
 - record information
 - weigh and measure goods
- selling skills to use a range of selling techniques

Required knowledge

- customer types and needs, including:
 - customer behaviour and cues

- customer buying motives
- demographics, lifestyle and income
- individual and cultural differences
- types of customer needs, such as:
 - functional
 - psychological
- relevant industry codes of practice, legislation and statutory requirements relating to the sale of products and services
- selling techniques, including:
 - add-ons and complementary sales
 - closing techniques
 - opening techniques
 - overcoming customer objections
 - recognising buying signals
 - using strategies to focus customer on specific merchandise
- specific product knowledge for area or section
- store merchandise and service range
- store policies and procedures in regard to:
 - allocated duties and responsibilities
 - selling products and services and sales performance

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- applies product knowledge and uses appropriate sales approach to sell the benefits of products and services, overcome objections and close sales
- uses questioning, listening and observation skills to determine customer requirements
- applies store policies and procedures in regard to selling products and services
- maximises sales opportunities according to store policies and procedures
- applies industry codes of practice, relevant legislation and statutory requirements in regard to selling products and services
- evaluates personal sales performance to maximise future

sales.

Context of and specific resources for assessment	Assessment must ensure access to: • a real or simulated retail work environment • relevant documentation, such as policy and procedures manuals • a range of customers with different requirements • a range of merchandise and products appropriate to the retail workplace • product labels and sources of product information.
Method of assessment	A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit: • observation of the candidate in the workplace • customer feedback • answers to questions about specific skills and knowledge • review of portfolios of evidence and third-party workplace reports of on-the-job performance.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the individual, accessibility of the item, and local industry and regional contexts) may also be included.

<i>Product knowledge</i> may include:	• features and benefits • handling and storage requirements • price • safety features • stock availability • use-by dates • warranties.
<i>Relevant sources of information</i> may include:	• demonstrations • internet • labels • product profiles

Legislative requirements may include:

- staff members
- store or supplier product manuals
- store tours
- videos.
- industry codes of practice
- liquor laws
- lottery legislation
- work health and safety (WHS)
- sale of second-hand goods
- sale of X and R-rated products
- tobacco laws
- Australian consumer law and fair trading Acts
- trading hours
- transport, storage and handling of goods.

Customers may include:

- customers with routine or special requests
- internal and external contacts
- new or repeat contacts
- people from a range of social, cultural and ethnic backgrounds
- people with varying physical and mental abilities.

Routine customer questions may relate to:

- availability
- features and benefits
- price and price reductions
- quality.

Problem solving may be affected by:

- resource implications
- store policies and procedures.

Sales transactions may be completed:

- face-to-face
- online
- over the telephone.

Unit Sector(s)

Cross-Sector

Competency Field

Sales

TAEASS402A Assess competence

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to assess the competence of a candidate.

Application of the Unit

Application of the unit	This unit typically applies to assessors.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for assessment	1.1. Interpret <i>assessment plan</i> and confirm organisational, legal and ethical requirements for conducting assessment with relevant people 1.2. Access and interpret relevant <i>benchmarks for assessment</i> and nominated <i>assessment tools</i> to confirm the requirements for evidence to be collected 1.3. Arrange identified material and physical resource requirements according to assessment system policies and procedures 1.4. Organise <i>specialist support</i> required for assessment 1.5. Explain, discuss and agree details of the assessment plan with candidate
2. Gather quality evidence	2.1. Use agreed <i>assessment methods</i> and tools to gather, organise and document evidence in a format suitable for determining competence 2.2. Apply the principles of assessment and rules of evidence in gathering quality evidence 2.3. Determine opportunities for evidence gathering in actual or simulated activities through consultation with the candidate and relevant personnel 2.4. Determine opportunities for integrated assessment activities and document any changes to assessment instruments where required
3. Support the candidate	3.1. Guide candidates in gathering their own evidence to support recognition of prior learning (RPL) 3.2. Use appropriate communication and interpersonal skills to develop a professional relationship with the candidate that reflects sensitivity to <i>individual differences</i> and enables two-way <i>feedback</i> 3.3. Make decisions on reasonable adjustments with the

ELEMENT	PERFORMANCE CRITERIA
	candidate, based on candidate's needs and characteristics 3.4. Access required specialist support in accordance with the assessment plan 3.5. Address any OHS risk to person or equipment immediately
4. Make the assessment decision	4.1. Examine collected evidence and evaluate it to ensure that it reflects the evidence required to demonstrate competence 4.2. Use judgement to infer whether competence has been demonstrated, based on the available evidence 4.3. Make assessment decision in line with agreed assessment procedures and according to agreed assessment plan 4.4. Provide clear and constructive feedback to candidate regarding the assessment decision and develop any follow-up action plan required
5. Record and report the assessment decision	5.1. Record assessment outcomes promptly and accurately 5.2. Complete and process an assessment report according to agreed assessment procedures 5.3. Inform other relevant parties of the assessment decision according to confidentiality conventions
6. Review the assessment process	6.1. Review the assessment process in consultation with relevant people to improve own future practice 6.2. Document and record the review according to relevant assessment system policies and procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- analysis and interpretation skills to:
 - break down competency standards
 - interpret assessment tools and other assessment information, including those used in RPL

REQUIRED SKILLS AND KNOWLEDGE

- identify candidate needs
- make judgements based on assessment of available evidence
- observation skills to:
 - recognise candidate's prior learning
 - determine candidate's performance
 - identify when candidate may need assistance during the assessment processes
- research and evaluation skills to:
 - access required human and material resources for assessment
 - access assessment system policies and procedures
 - access RPL policies and procedures
 - evaluate evidence
 - evaluate assessment process
- cognitive skills to:
 - weigh up the evidence and make a judgement
 - consider and recommend reasonable adjustments
- decision-making skills to:
 - recognise a candidate's prior learning
 - make a decision on a candidate's competence
- literacy skills to:
 - read and interpret relevant information to conduct assessment
 - prepare required documentation and records or reports of assessment outcomes in required format
- communication and interpersonal skills to:
 - explain the assessment, including RPL process
 - give clear and precise instructions
 - ask effective questions
 - provide clarification
 - discuss process with other relevant people
 - give appropriate feedback
 - discuss assessment outcome
 - use language appropriate to candidate and assessment environment
 - establish a working relationship with candidate

Required knowledge

- competency-based assessment, including:
 - vocational education and training as a competency-based system
 - criterion-referenced assessment as distinct from norm-referenced assessment
 - competency standards as the basis of qualifications

REQUIRED SKILLS AND KNOWLEDGE

- structure and application of competency standards
- principles of assessment and how they are applied
- rules of evidence and how they are applied
- range of assessment purposes and assessment contexts, including RPL
- different assessment methods, including suitability for gathering various types of evidence, suitability for content of units, and resource requirements and associated costs
- reasonable adjustments and when they are applicable
- types and forms of evidence, including assessment tools that are relevant to gathering different types of evidence used in competency-based assessment, including RPL
- potential barriers and processes relating to assessment tools and methods
- assessment system, including policies and procedures established by the industry, organisation or training authority
- RPL policies and procedures established by the organisation
- cultural sensitivity and equity considerations
- relevant policy, legislation, codes of practice and national standards, including commonwealth and state or territory legislation that may affect training and assessment in the vocational education and training sector, such as:
 - copyright and privacy laws in terms of electronic technology
 - security of information
 - plagiarism
 - training packages and competency standards
 - licensing requirements
 - industry and workplace requirements
 - duty of care under common law
 - recording information and confidentiality requirements
 - anti-discrimination, including equal employment opportunity, racial vilification and disability discrimination
 - workplace relations
 - industrial awards and enterprise agreements
- OHS responsibilities associated with assessing competence, such as:
 - requirements for reporting hazards and incidents
 - emergency procedures
 - procedures for use of relevant personal protective equipment
 - safe use and maintenance of relevant equipment
 - sources of OHS information

Evidence Guide

EVIDENCE GUIDE	
The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	Assessment must address the scope of this unit and reflect all components of the unit. Arrange of appropriate assessment methods and evidence-gathering techniques must be used to determine competency. A judgement of competency should only be made when the assessor is confident that the required outcomes of the unit have been achieved and that consistent performance has been demonstrated.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of the ability to: • assess competence of a number of candidates within the vocational education and training context against different units of competency or accredited curricula, following the relevant assessment plan • assess at least one candidate for RPL • consider reasonable adjustment and the reasons for decisions in at least one assessment • cover an entire unit of competency and show: • the application of different assessment methods and tools involving a range of assessment activities and events • two-way communication and feedback • how judgement was exercised in making the assessment decision • how and when assessment outcomes were recorded and reported • assessment records and reports completed in accordance with assessment system and organisational, legal and ethical requirements • how the assessment process was reviewed.
Context of and specific resources for assessment	Evidence must be gathered in the workplace whenever possible. Where no workplace is available, a simulated workplace must be provided.
Method of assessment	
Guidance information for assessment	For further information about assessment of this and other TAE units, refer to relevant implementation guidance published on the IBSA website (www.ibsa.org.au).

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
<i>Assessment plan</i> may include:	• overall planning, describing: • what is to be assessed • when assessment is to take place • where assessment is to take place • how assessment is to take place.
<i>Benchmarks for assessment:</i>	• refer to a criterion against which the candidate is assessed • may be a competency standard/unit of competency, assessment criteria of course curricula, performance specifications, or product specifications.
<i>Assessment tools</i> may include:	• both the instrument and the procedures for gathering and interpreting evidence in accordance with designated assessment methods • instruments to be used for gathering evidence, such as: • profile of acceptable performance measures • templates and proformas • specific questions or activities • evidence and observation checklists • checklists for evaluating work samples • candidate self-assessment materials • procedures, information and instructions for the assessor and candidate relating to the use of assessment instruments and assessment conditions.
<i>Specialist support</i> may include:	• assistance by third party, such as carer or interpreter • support from specialist educator • provision of developed online assessment activities • support for remote or isolated candidates and assessors • support from subject matter or safety experts • advice from regulatory authorities • assessment teams and panels

RANGE STATEMENT	
	• support from lead assessors • advice from policy development experts.
Assessment methods include:	• particular techniques used to gather different types of evidence, such as: • direct observation • structured activities • oral or written questioning • portfolios of evidence • review of products • third-party feedback.
Individual differences may include:	• English language, literacy and numeracy barriers • physical impairment or disability • intellectual impairment or disability • medical condition that may impact on assessment, such as arthritis, epilepsy, diabetes and asthma • learning difficulties • mental or psychological disability • religious and spiritual observances • cultural images and perceptions • age • gender.
Feedback may include:	• ensuring assessment/RPL process is understood • ensuring candidate concerns are addressed • enabling questions and answers • confirming outcomes • identifying further evidence to be provided • discussing action plans • confirming gap training needed • providing information regarding available appeal processes • suggesting improvements in evidence gathering and presentation.
Consultation may involve:	• moderation with other assessors, or training and assessment coordinators • discussions with client, team leaders, managers, RPL coordinators, supervisors, coaches and mentors • technical and subject experts • English language, literacy and numeracy experts.

Unit Sector(s)

Unit sector	Assessment

Competency field

Competency field	

Co-requisite units

Co-requisite units		

TAEDEL402A Plan, organise and facilitate learning in the workplace

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to plan, organise and facilitate learning for individuals in a workplace.

Application of the Unit

Application of the unit	This unit typically applies to a person working as an entry level trainer, teacher or facilitator, team leader or workplace supervisor, or any employee responsible for guiding learning through work.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Establish effective work environment for learning	1.1. Establish and agree upon objectives and scope of the work-based learning 1.2. Analyse work practices and routines to determine their effectiveness in meeting established learning objectives 1.3. Identify and address <i>OHS implications</i> of using work as the basis for learning
2. Develop a work-based learning pathway	2.1. Address <i>contractual requirements</i> and responsibilities for learning at work 2.2. Arrange for integration and monitoring of external learning activities with the <i>work-based learning pathway</i> 2.3. Obtain agreement from relevant personnel to implement the work-based learning pathway
3. Establish the learning-facilitation relationship	3.1. Identify context for learning and individual's learning style 3.2. Select appropriate technique or process to facilitate learning and explain the basis of the technique to learner 3.3. Develop, document and discuss <i>individualised learning plan</i> with learner 3.4. Access, read and interpret documentation outlining the OHS responsibilities of the various parties in the

ELEMENT	PERFORMANCE CRITERIA
	learning environment 3.5. Monitor supervisory arrangements appropriate to learner's levels of knowledge, skill and experience to provide support and encouragement and ensure learner's health and safety
4. Implement work-based learning pathway	4.1. Sequence introduction of workplace tasks, activities and processes to reflect the agreed work-based learning pathway 4.2. Explain objectives of work-based learning and the processes involved to learner 4.3. Encourage learner to take responsibility for learning and to self-reflect 4.4. Develop techniques that facilitate learner's transfer of skills and knowledge
5. Maintain and develop the learning/facilitation relationship	5.1. Prepare for each session 5.2. Structure learning activities to support and reinforce new learning, build on strengths, and identify areas for further development 5.3. Observe learner cues and change approaches where necessary to maintain momentum 5.4. Practise ethical behaviour at all times 5.5. Monitor effectiveness of the learning/facilitation relationship through regular meetings between the parties
6. Close and evaluate the learning/facilitation relationship	6.1. Carry out the closure smoothly, using appropriate interpersonal and communication skills 6.2. Seek feedback from learner on the outcomes achieved and value of the relationship 6.3. Evaluate and document process, including impact, self evaluation and reflection, and file according to legal and organisational requirements
7. Monitor and review the effectiveness of the work-based learning pathway	7.1. Document work performance and learning achievement and keep records according to organisational requirements 7.2. Evaluate effectiveness of the work-based pathway against the objectives, processes and techniques used 7.3. Recommend improvements to work-based practice in light of the review process

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- oral communication and language skills to:
 - motivate the learner
 - transfer skills and knowledge
- interpersonal skills to maintain appropriate relationships
- observation skills to monitor individual progress
- literacy skills to:
 - read and interpret organisational documents, legal documents and contracts
 - complete and maintain documentation
- organisational skills to provide guidance and feedback to individuals
- communication skills, including:
 - using effective verbal and non-verbal language
 - using critical listening and questioning techniques
 - giving constructive and supportive feedback
 - assisting learners to paraphrase advice or instructions back to the trainer/facilitator
 - providing clear and concrete options and advice
 - using appropriate industry/profession terminology and language
 - ensuring language, literacy and numeracy used is appropriate to learners

Required knowledge

- systems, processes and practices within the organisation where work-based learning is taking place
- operational demands of the work and impact of changes on work roles
- organisational work culture, including industrial relations environment
- systems for identifying skill needs
- introductory knowledge of different learning styles and how to encourage learning in each, for example:
 - visual learners
 - audio learners
 - kinaesthetic learners
 - theoretical learners
- relevant policy, legislation, codes of practice and national standards that may affect training and assessment in the vocational education and training sector
- OHS relating to the work role, including:
 - hazards relating to the industry and specific workplace

REQUIRED SKILLS AND KNOWLEDGE

- reporting requirements for hazards and incidents
- specific procedures for work tasks
- safe use and maintenance of relevant equipment
- emergency procedures
- sources of OHS information

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must address the scope of this unit and reflect all components of the unit. Arrange of appropriate assessment methods and evidence-gathering techniques must be used to determine competency. A judgement of competency should only be made when the assessor is confident that the required outcomes of the unit have been achieved and that consistent performance has been demonstrated.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the ability to:

- prepare and facilitate work-based learning
- provide evidence of a minimum of two examples of developing work-based learning pathways, that include:
 - identifying needs for learning
 - analysing work practices, work environment and work activities
 - organising and allocating work in a way that reflects learning needs and provides effective learning opportunities through work processes
- provide a minimum of two examples of a learning facilitation relationship being conducted:
 - with different individuals
 - demonstrating communication skills and flexibility
 - demonstrating one or more of the processes or techniques identified.

Context of and specific resources for assessment

Evidence must be gathered in the workplace wherever possible. Where no workplace is available, a simulated workplace must be

EVIDENCE GUIDE	
	provided. Assessment must ensure access to information about work activities.
Method of assessment	
Guidance information for assessment	For further information about assessment of this and other TAE units, refer to relevant implementation guidance published on the IBSA website (www.ibsa.org.au).

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
<i>OHS implications</i> may include:	• OHS obligations • workplace OHS policies and procedures • ensuring work practices, routines and proposed changes do not pose a risk to learners and others.
<i>Contractual requirements</i> may include:	• training plans under apprenticeships/traineeships • requirements of government-funded training programs, such as Workplace English Language and Literacy (WELL).
<i>Work-based learning pathway</i> may include:	• identifying specific goals for work-based learning • identifying job tasks or activities to be included in learning process • appropriate sequencing of job tasks/activities to reflect learner incremental development • direct guidance and modelling from experienced co-workers and experts • opportunities for practice.
<i>Individualised learning plan</i> may include:	• information about individual's learning style, learner characteristics, and the context for learning • clear boundaries and expectations of the learning/facilitation relationship • documented equity or additional support needs for the

RANGE STATEMENT	
	learner • performance benchmarks to be achieved • activities and processes which together will achieve the benchmarks.
<i>Ethical behaviour</i> includes:	• trust • integrity • privacy and confidentiality of the session • following organisational policies • knowing own limitations • having a range of other intervention referrals ready when needed • honesty • fairness to others.
<i>Impact</i> may be:	• successful achievement, rate of achievement, or lack of achievement of identified goals • achievement of other outcomes as a result of the relationship • development of new goals • new or increased motivation to learn • greater capacity to learn • increase in learner's self-confidence.
<i>Self-evaluation and reflection</i> may include:	• asking critical questions about: • own ability • what worked or didn't work • how the relationship building process could be improved • reviewing records and journals on sessions and critically evaluating own performance • reviewing feedback from learner and identifying critical aspects and areas for improvement.

Unit Sector(s)

Unit sector	Delivery and facilitation

Competency field

Competency field	

Co-requisite units

Co-requisite units		

TLIA2041A Manually sort mail and parcels

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to manually sort mail and parcels in accordance with workplace requirements, including carrying out required preparations of the work area, manually sorting mail and parcels, and finalising the required sorting processes. The sorting processes include accurately and efficiently organising mail and parcels into groups for further processing or distribution and containerising processed mail and parcels ready for transfer to the next processing or distribution point. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Application of the Unit

Work must be carried out in compliance with the regulations and workplace requirements pertaining to the processing of mail and parcels.

Work is normally performed under general supervision, usually in a team or outstation environment. It involves the application of workplace procedures and regulatory requirements to the manual sorting of mail and parcels as part of work activities in the postal and allied industries.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability Skills

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

1 Prepare to sort mail and parcels manually	1.1 Individual and work team priorities and responsibilities are identified and confirmed 1.2 All OH&S and environment protection procedures and requirements for the workplace are identified, accessed and applied 1.3 The availability of mail and parcels to be processed is identified and confirmed 1.4 Mail and parcels to be processed are transferred to processing point 1.5 Labels for identifying the destination of mail are created and affixed to trays
2 Sort mail and parcels manually	2.1 Internal operating procedures and standards are applied to the manual processing of parcels and mail 2.2 Mail and parcels are inspected to ensure that all criteria have been met 2.3 Mail and parcels are sorted accurately and correctly in compliance with priority for processing and manual sorting procedures 2.4 Mail and parcels are handled safely to minimise risk of injury to people and damage to mail and parcels 2.5 Mail and parcels that are damaged, underpaid, incorrectly classified, or are non-conforming items are identified, separated and re-processed in accordance with workplace procedures 2.6 Legal requirements and workplace policies and procedures in relation to the security of mail and parcels are followed
3 Complete process for	3.1 Mail and parcel sorting frames/bag racks are cleared down, and

ELEMENT	PERFORMANCE CRITERIA
manually sorting mail and parcels	mail and parcel containers/bags are sealed and labelled in accordance with workplace procedures
	3.2 Mail and parcels are transferred to next processing or distribution point using appropriate shifting equipment and labels scanned as required
	3.3 Information required to complete records of mail and parcels processed is provided and recorded
	3.4 Excess equipment is removed and work area is prepared for next activity/shift

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

- Australian and international codes and regulations relevant to mail operations
- Relevant OH&S and environmental protection procedures and guidelines
- Workplace procedures and policies for the manual sorting of mail and parcels
- Focus of operation of work systems, equipment, management and site operating systems for the manual sorting of mail and parcels
- Problems that may occur when manually sorting mail and parcels and appropriate action that can be taken to resolve/avoid the problems
- Requirements of mail sorting systems, operations and relevant equipment
- Hazards that may occur during the manual sorting of mail and parcels and ways of controlling the risks involved
- Site layout
- Relevant personal protective equipment and procedures for its use

Required skills:

- Communicate effectively with others when manually sorting mail and parcels
- Read and interpret instructions, procedures and labels relevant to the manual sorting of mail and parcels
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to the manual sorting of mail and parcels
- Work collaboratively with others when manually sorting mail and parcels

Required skills:

- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others
- Promptly report and/or rectify any identified problems, faults or malfunctions that may arise during the manual sorting of mail and parcels in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unplanned events that may arise during the manual sorting of mail and parcels
- Plan own work including predicting consequences and identifying improvements
- Apply security and safety precautions and required action to minimise, control or eliminate hazards that may exist during work activities
- Modify activities depending on differing operational contingencies, risk situations and environments
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment
- Operate and adapt to differences in equipment and systems in accordance with standard operating procedures
- Select and use required personal protective equipment conforming to industry and OH&S standards
- Identify, select and use relevant equipment, processes and procedures when manually sorting mail and parcels

Evidence Guide**EVIDENCE GUIDE**

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:
 - the underpinning knowledge and skills
 - relevant legislation and workplace procedures
 - other relevant aspects of the range statement

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of time and in a suitable range of contexts
- Resources for assessment include:

EVIDENCE GUIDE

- a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
- access to an appropriate range of relevant operational situations in the workplace
- In both real and simulated environments, access is required to:
 - relevant and appropriate materials and equipment, and
 - applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

- Assessment of this unit must be undertaken by a registered training organisation
- As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
- Practical assessment must occur:
 - through activities in an appropriately simulated environment at the registered training organisation, and/or
 - in an appropriate range of situations in the workplace

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Work may be conducted:	• in a range of work environments • by day or night
Workplaces may comprise:	• large, medium or small worksites
Operations may include:	• shiftwork
Customers may be:	• internal or external
Hazards may include:	• vehicular traffic and pedestrians • dust and vapours • hazardous or dangerous materials • humidity, air temperature

RANGE STATEMENT

	• lighting conditions • machinery/equipment moving parts • noise
Weighing devices may be:	• mechanical • automated • weighbridge
Work priorities may be communicated through:	• briefings • noticeboards • announcements
Equipment may include:	• mail trays, tubs and bags • sorting frame/bag rack • scanners • tipping belt • knife • pallet jack/maverick • powered lifters • king fishers • scales • carousel • Unit Load Device (ULD) and Wheeled Unit Load Device (WULD) • Vertical Sorting Frame (VSF) and Vertical Sorting Division (VSD) • ULD tipper • conveyor belts • strapping machine
Personal protective equipment may include:	• gloves • safety headwear and footwear • safety glasses • two-way radios • protective clothing • high visibility clothing
Communication in the work area may include:	• phone • fax • email • electronic data transfer (EDI) • RF systems • radio • oral, aural or signed communications
Depending on the type of	• company procedures

RANGE STATEMENT

organisation concerned and the local terminology used, workplace procedures may include:

Information/documents may include:

- enterprise procedures
- organisational procedures
- established procedures
- workplace policies, operating procedures and practices
- Management Operating System (MOS)
- Management Information System (MIS)
- sorting system information which may include:
 - postcode book, national sort plan and state sort plan
 - post guide
 - international postcode directory
 - labels chart
 - mail identification numbers, codes and labels
- manifests, consignment notes, bar codes, mail and container identification
- quality assurance procedures
- induction documentation
- competency standards and training materials
- job specifications and procedures
- award, enterprise bargaining agreement or other industrial arrangements
- manufacturers specifications
- codes of practice, including national standards for manual handling and the industry safety code
- supplier and or/client instructions
- HAZCHEM chart/material safety data sheets
- safety observation feedback program
- emergency procedures
- relevant codes and regulations pertaining to mail operations
- Australian and international regulations and codes of practice for the handling and transport of dangerous goods and hazardous substances
- relevant state/territory OH&S and environmental protection legislation
- workplace relations regulations
- workers compensation regulations
- equal opportunity, equal employment opportunity and affirmative action legislation

Applicable regulations and legislation may include:

Unit Sector(s)

Not Applicable

Competency Field

Competency Field A - Handling Cargo/Stock

TLIA2043A Consolidate mail

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to consolidate mail in accordance with workplace requirements, including carrying out required preparations, consolidating mail, and completing the consolidation operations. The process includes the initial identification and separation of mail prior to movement to the despatch dock. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Application of the Unit

Work must be carried out in compliance with the regulations and workplace requirements pertaining to the processing of mail and parcels.

Work is performed under some supervision generally within a team environment. It involves the application of workplace procedures and regulatory requirements to consolidation of mail as part of work activities in the postal and allied industries.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability Skills

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

1 Prepare for consolidation of mail

- 1.1 Individual and work team priorities and responsibilities are identified and confirmed
- 1.2 All OH&S and environment protection procedures and requirements for the workplace are identified, accessed and applied
- 1.3 Mail to be consolidated is identified and accessed

2 Consolidate mail

- 2.1 Internal operating procedures and standards are applied to the consolidation of mail
- 2.2 Mail is consolidated accurately and correctly in compliance with workplace requirements
- 2.3 Mail is handled safely to minimise risk of injury to people and damage to mail
- 2.4 Mail to be consolidated is placed into mail containers for movement to next process point

3 Complete consolidation of mail

- 3.1 Mail containers are sealed and labelled accurately and correctly in accordance with workplace procedures
- 3.2 Information required to complete records of mail processed is provided and recorded
- 3.3 Mail containers are transferred to designated storage area to await movement to next processing point using appropriate shifting equipment
- 3.4 Excess equipment is removed from work area and stored appropriately

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

- Australian and international codes and regulations relevant to mail operations
- Relevant OH&S and environmental protection procedures and guidelines
- Workplace procedures and policies for the consolidation of mail
- Focus of operation of work systems, equipment, management and site operating systems for the consolidation of mail
- Problems that may occur when consolidating mail and appropriate action that can be taken to resolve or avoid the problems
- Requirements of mail consolidation systems, operations and relevant equipment
- Safety and security hazards that may occur during the consolidation of mail and ways of controlling the risks involved
- Relevant personal protective equipment and procedures for its use
- Site layout

Required skills:

- Communicate effectively with others when consolidating mail
- Read and interpret instructions, procedures and labels relevant to the consolidation of mail
- Complete documentation related to the consolidation of mail
- Work collaboratively with others when consolidating mail
- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others
- Promptly report and/or rectify any identified problems that may occur when consolidating mail in accordance with regulatory requirements and workplace procedures
- Plan own work including predicting consequences and identifying improvements
- Implement contingency plans for unplanned events that may occur when consolidating mail
- Interpret and apply relevant agreements, codes of practice or other legislative requirements
- Apply safety and security precautions and required action to minimise, control or eliminate hazards that may exist during work activities
- Modify activities depending on differing operational contingencies, risk situations and environments
- Work systematically with required attention to detail without injury to self or others, or damage to mail or equipment
- Operate and adapt to differences in equipment in accordance with standard operating procedures

Required skills:

- Select and use required personal protective equipment conforming to industry and OH&S standards
- Identify, select and use relevant equipment, processes and procedures when consolidating mail

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:
 - the underpinning knowledge and skills
 - relevant legislation and workplace procedures
 - other relevant aspects of the range statement

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of time and in a suitable range of contexts
- Resources for assessment include:
 - a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
 - access to an appropriate range of relevant operational situations in the workplace
- In both real and simulated environments, access is required to:
 - relevant and appropriate materials and equipment, and
 - applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

- Assessment of this unit must be undertaken by a registered training organisation
- As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
- Practical assessment must occur:
 - through activities in an appropriately simulated

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- environment at the registered training organisation, and/or
- in an appropriate range of situations in the workplace

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Work may be conducted:	• in a range of work environments • by day or night
Workplaces may comprise:	• large, medium or small worksites
Facilities may be:	• within an airport environment
Customers may be:	• external (including international) or internal
Hazards may include:	• vehicular traffic and pedestrians • dust and vapours • hazardous or dangerous materials • humidity, air temperature • lighting conditions • machinery/equipment moving parts • noise • insects
Weighing devices may be:	• mechanical • automated • weighbridge
Work priorities may be communicated through:	• briefings • noticeboards • announcements
Equipment may include:	• forklift • BT lifting equipment • kingfishers • plastic and cardboard trays • bags • flute trays • bins

RANGE STATEMENT

	• pallet jacks • stillages • unit load device (ULD) • wheeled unit load device (WULD) • strapping machine • TMS (Tray Management System) • scanners • label printers
Personal protective equipment may include:	• gloves • safety headwear and footwear • safety glasses • two-way radios • protective clothing • high visibility clothing
Communication in the work area may include:	• phone • fax • email • electronic data transfer (EDI) • RF systems • radio • oral, aural or signed communications
Depending on the type of organisation concerned and the local terminology used, workplace procedures may include:	• company procedures • enterprise procedures • organisational procedures • established procedures
Information/documents may include:	• workplace policies, operating procedures and practices • Management Operating System (MOS) • Management Information System (MIS) • manifests, consignment notes, bar codes, mail and container identification • mail identification numbers, codes and labels • machine/equipment operations manuals • air and surface movement schedules • international aviation codes (IATA) • quality assurance procedures • induction documentation • competency standards and training materials • job specifications and procedures • award, enterprise bargaining agreement or other industrial arrangements

RANGE STATEMENT

Applicable regulations and legislation may include:

- manufacturers specifications
- codes of practice, including national standards for manual handling and the industry safety code
- supplier and or/client instructions
- HAZCHEM chart/material safety data sheets
- safety observation feedback program
- emergency procedures
- relevant codes and regulations pertaining to mail operations
- Australian and international regulations and codes of practice for the handling and transport of dangerous goods and hazardous substances
- relevant state/territory OH&S and environmental protection legislation
- workplace relations regulations
- workers compensation regulations
- equal opportunity, equal employment opportunity and affirmative action legislation

Unit Sector(s)

Not Applicable

Competency Field

Competency Field A - Handling Cargo/Stock

TLIA2047A Stream mail

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to stream mail in readiness for the next stage of processing in accordance with workplace requirements, including preparing to stream mail, streaming mail in accordance with workplace procedures, and finalising all required streaming operations. The process may include opening, facing up and traying mail. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Application of the Unit

Work must be carried out in compliance with the regulations and workplace requirements pertaining to the streaming of mail and parcels.

Work is normally performed under general supervision, usually within a team environment. It involves the application of workplace procedures and regulatory requirements to the streaming of mail as part of work activities in the postal and allied industries.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability Skills

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

1 Prepare to stream mail

- 1.1 Individual and work team priorities and responsibilities are identified and confirmed
- 1.2 All OH&S and environment protection procedures and requirements for the workplace are identified, accessed and applied
- 1.3 Mail to be streamed is identified, accessed and prepared

2 Stream mail

- 2.1 Internal operating procedures and standards are applied to the streaming of mail
- 2.2 Mail is categorised and streamed accurately and correctly in compliance with priority for streaming
- 2.3 Mail is handled safely to minimise risk of injury to people and damage to mail

3 Complete streaming of mail

- 3.1 Mail containers are loaded onto appropriate mail movement device and labelled
- 3.2 Information required to complete records of mail processed is provided and recorded
- 3.3 Mail containers are transferred to next processing point using appropriate shifting equipment
- 3.4 Excess equipment is removed and work area is prepared for next activity shift

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

REQUIRED KNOWLEDGE AND SKILLS

Required knowledge:

- Australian and international codes and regulations relevant to mail operations
- Relevant OH&S and environmental protection procedures and guidelines
- Workplace procedures and policies for the streaming of mail
- Focus of operation of work systems, equipment, management and site operating systems for the streaming of mail
- Problems that may occur when streaming mail and appropriate action that can be taken to resolve avoid the problems
- Requirements of mail streaming systems, operations and relevant equipment
- Hazards that may occur during the streaming of mail and ways of controlling the risks involved
- Relevant personal protective equipment and procedures for its use
- Site layout

Required skills:

- Communicate effectively with others when streaming mail
- Read and interpret instructions, procedures and labels relevant to the streaming of mail
- Complete documentation related to the streaming of mail
- Work collaboratively with others when streaming mail
- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others
- Promptly report and/or rectify any identified problems, faults or malfunctions that may occur when streaming mail in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unplanned events when streaming mail
- Plan own work including predicting consequences and identifying improvements
- Interpret and apply relevant agreements, codes of practice or other legislative requirements
- Apply safety and security precautions and required action to minimise, control or eliminate hazards that may exist when streaming mail
- Monitor work activities in terms of planned schedule
- Modify activities depending on differing operational contingencies, risk situations and environments
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment
- Operate and adapt to differences in equipment in accordance with standard operating procedures
- Identify, select and use relevant equipment, processes and procedures when streaming mail
- Select and use required personal protective equipment conforming to industry and OH&S

Required skills:

standards

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:
 - the underpinning knowledge and skills
 - relevant legislation and workplace procedures
 - other relevant aspects of the range statement

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of time and in a suitable range of contexts
- Resources for assessment include:
 - a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
 - access to an appropriate range of relevant operational situations in the workplace
- In both real and simulated environments, access is required to:
 - relevant and appropriate materials and equipment, and
 - applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

- Assessment of this unit must be undertaken by a registered training organisation
- As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
- Practical assessment must occur:
 - through activities in an appropriately simulated environment at the registered training organisation, and/or

EVIDENCE GUIDE

- in an appropriate range of situations in the workplace

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Work may be conducted:	• in a range of work environments • by day or night
Workplaces may comprise:	• large, medium or small worksites
Facilities may be:	• within an airport environment
Customers may be:	• internal or external
Hazards may include:	• vehicular traffic and pedestrians • dust and vapours • hazardous or dangerous materials • humidity, air temperature • lighting conditions • machinery/equipment moving parts • noise • insects
Weighing devices may be:	• mechanical • automated • weighbridge
Work priorities may be communicated through:	• briefings • noticeboards • announcements
Equipment may include:	• streaming indicators • kingfishers • plastic and cardboard mail trays tubs receptacles • BT lifting equipment • label printer • opening knife • belts • trolleys • bins

RANGE STATEMENT

Personal protective equipment may include:	• unit load device (ULD) • wheeled unit load device (WULD) • stillages • forklifts • pallet jack • gloves • safety headwear and footwear • safety glasses • two-way radios • protective clothing • high visibility clothing
Communication in the work area may include:	• phone • fax • email • electronic data transfer (EDI) • RF systems • radio • oral, aural or signed communications
Depending on the type of organisation concerned and the local terminology used, workplace procedures may include:	• company procedures • enterprise procedures • organisational procedures • established procedures
Information/documents may include:	• workplace policies, operating procedures and practices • Management Operating System (MOS) • Management Information System (MIS) • sorting system information including: • postcode book, national sort plan and state sort plan • postal guide • international postcode directory • label charts • manifests, consignment notes, bar codes, mail and container identification • mail identification numbers, codes and labels • machine equipment operations manuals • quality assurance procedures • induction documentation • competency standards and training materials • job specifications and procedures • award, enterprise bargaining agreement or other industrial arrangements

RANGE STATEMENT

Applicable regulations and legislation may include:

- manufacturers specifications
- codes of practice, including national standards for manual handling and the industry safety code
- supplier and or/client instructions
- HAZCHEM chart/material safety data sheets
- safety observation feedback program
- emergency procedures
- relevant codes and regulations pertaining to mail operations
- Australian and international regulations and codes of practice for the handling and transport of dangerous goods and hazardous substances
- relevant state/territory OH&S and environmental protection legislation
- workplace relations regulations
- workers compensation regulations
- equal opportunity, equal employment opportunity and affirmative action legislation

Unit Sector(s)

Not Applicable

Competency Field

Competency Field A - Handling Cargo/Stock

TLIW3006A Operate computerised mail and parcels sorting equipment

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge to operate computerised mail and parcels sorting equipment in accordance with workplace requirements including setting up mail and parcels sorting equipment for operation, operating the equipment in accordance with workplace procedures, and completing the sorting process for mail and parcels as required. The process includes containerising processed mail and parcels for transfer to the next processing or distribution point. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Application of the Unit

Work must be carried out in compliance with the regulations and workplace requirements pertaining to the processing of mail and parcels.

Work is normally performed under general supervision, usually in a team or out-station environment.

Work involves the application of workplace procedures and regulatory requirements to the operation of computerised mail and parcels sorting equipment as part of work activities in the postal and allied industries.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability Skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

1 Set up mail and parcels sorting equipment for operation

- 1.1 Individual and work team priorities and responsibilities are identified and confirmed
- 1.2 All OH&S and environment protection procedures and requirements for the relevant mail and parcels sorting equipment are identified, accessed and applied
- 1.3 The availability of mail and parcels to be sorted is identified and confirmed
- 1.4 The appropriate equipment configuration and sort plan is identified, accessed and applied
- 1.5 Mail and parcels to be sorted are transferred to sorting point
- 1.6 Labels for identifying the destination of mail are created and affixed to trays

2 Operate mail and parcels sorting equipment

- 2.1 Internal operating procedures and equipment operating procedures are applied
- 2.2 Mail and parcels are sorted accurately and correctly in compliance with priority for sorting
- 2.3 Mail and parcels are handled safely to minimise risk of injury to people and damage to mail and parcels and processing equipment
- 2.4 Mail and parcels that are incorrectly classified and non-conforming items are identified, separated and re-processed
- 2.5 Mail and parcels that have been sorted to their correct

ELEMENT**PERFORMANCE CRITERIA**

	destination are placed in appropriate mail container for distribution
3 Complete sorting process for mail and parcels	3.1 Mail and parcels stackers/containers/bags are cleared down, sealed and labelled in accordance with workplace procedures 3.2 Mail and parcels are transferred to next sorting point using appropriate shifting equipment, and labels are scanned as required 3.3 Information required to complete records of mail and parcels processed is provided and recorded 3.4 Excess equipment is removed and work area is prepared for next activity/shift

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

- Australian and international codes and regulations relevant to mail operations
- Relevant OH&S and environmental protection procedures and guidelines
- Workplace procedures and policies for the operation of computerised mail and parcels sorting equipment
- Focus of operation of work systems, equipment, management and site operating systems for the operation of computerised mail and parcels sorting equipment
- Problems that may occur when operating computerised mail and parcels sorting equipment and appropriate action that can be taken to resolve/avoid the problems
- Requirements of automated mail processing systems, operations and relevant equipment
- Hazards that may occur during the operation of computerised mail and parcels sorting equipment and ways of controlling the risks involved
- Site layout
- Relevant personal protective equipment and procedures for its use

Required skills:

- Communicate effectively with others when operating computerised mail and parcels sorting equipment
- Read and interpret instructions, procedures, information and labels relevant to the operation of

Required skills:

computerised mail and parcels sorting equipment

- Interpret and follow operational instructions and prioritise work when operating computerised mail and parcels sorting equipment
- Interpret and apply relevant agreements, codes of practice or other legislative requirements
- Complete documentation related to the operation of computerised mail and parcels sorting equipment
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when operating computerised mail and parcels sorting equipment
- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others
- Promptly report and/or rectify any identified problems, faults or malfunctions that may occur operating computerised mail and parcels sorting equipment in accordance with regulatory requirements and workplace procedures
- Plan own work including predicting consequences and identifying improvements
- Monitor work activities in terms of planned schedule
- Modify activities depending on differing operational contingencies, risk situations and environments
- Work systematically with required attention to detail without injury to self or others, or damage to equipment
- Select and use required personal protective equipment
- Identify, select and use relevant equipment, processes and procedures when operating computerised mail and parcels sorting equipment

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:
 - the underpinning knowledge and skills
 - relevant legislation and workplace procedures
 - other relevant aspects of the range statement

EVIDENCE GUIDE

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of time and in a suitable range of contexts
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 - access to an appropriate range of relevant operational situations in the workplace
- In both real and simulated environments, access is required to:
 - relevant and appropriate materials and equipment, and
 - applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

- Assessment of this unit must be undertaken by a registered training organisation
- As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
- Practical assessment must occur:
 - through activities in an appropriately simulated environment at the registered training organisation, and/or
 - in an appropriate range of situations in the workplace

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Work may be conducted:

- in a range of work environments
- by day or night

Workplaces may comprise:

- large, medium or small worksites

Operations may include:

- shiftwork

Customers may be:

- internal or external

RANGE STATEMENT

Hazards may include:

- vehicular traffic and pedestrians
- dust and vapours
- hazardous or dangerous materials
- humidity, air temperature
- lighting conditions
- machinery/equipment moving parts
- noise

Weighing devices may be:

- mechanical
- automated
- weighbridge

Work priorities may be communicated through:

- briefings
- noticeboards
- announcements

Equipment may include:

- mail trays, tubs and bags
- multi-line OCR
- AEG OCR
- bar code sorter
- flat sorting machine
- large parcels sorting machine
- small parcels sorting machine
- large letters sorting machine
- flat mail OCR
- scanners
- tipping belt
- pallet jack/maverick
- powered lifters
- kingfishers
- scales
- Unit Load Devices (ULDs) and Wheeled Unit Load Devices (WULDs)
- Vertical Sorting Frame (VSF) and Vertical Sorting Divisions (VSDs)
- ULD tipper
- conveyor belts
- strapping machine
- gloves
- safety headwear and footwear
- safety glasses
- two-way radios
- protective clothing

Personal protective equipment may include:

RANGE STATEMENT

Communication in the work area may include:

- high visibility clothing
- phone
- fax
- email
- electronic data transfer (EDI)
- RF systems
- radio
- oral, aural or signed communications

Depending on the type of organisation concerned and the local terminology used, workplace procedures may include:

- company procedures
- enterprise procedures
- organisational procedures
- established procedures

Information/documents may include:

- workplace policies, operating procedures and practices
- Management Operating System (MOS)
- Management Information System (MIS)
- sorting system information including:
 - postcode book, national sort plan and state sort plan
 - postal guide
 - international postcode directory
 - label charts
- mail identification numbers, codes and labels
- manifests, consignment notes, bar codes, mail and container identification
- quality assurance procedures
- induction documentation
- competency standards and training materials
- job specifications and procedures
- award, enterprise bargaining agreement or other industrial arrangements
- manufacturers specifications
- codes of practice, including national standards for manual handling and the industry safety code
- supplier and or/client instructions
- HAZCHEM chart/MSDS
- safety observation feedback program
- emergency procedures
- relevant codes and regulations pertaining to mail operations
- Australian and international regulations and codes of practice for the handling and transport of dangerous goods

Applicable regulations and legislation may include:

RANGE STATEMENT

- and hazardous substances,
- relevant state/territory OH&S and environmental protection legislation
- workplace relations regulations
- workers compensation regulations
- equal opportunity, equal employment opportunity and affirmative action legislation

Unit Sector(s)

Not Applicable

Competency Field

Competency Field W - Equipment and Systems Operations

ICP Printing and Graphic Arts

Modification History

Release Number	Release Date	Comments
Release 3.0	November 2018	1 new unit of competency - ICPPTD304 3 revised units of competency - ICPPTD301 - ICPPTD302 - ICPPTD303 1 revised skill set - ICPSS00002
Release 2.0	January 2016	Includes review of the following sectors: 3D Printing (3 new units of competency and 1 new skill set) - Certificate III Review (3 revised and converged qualifications to replace 11 qualifications and 1 revised and converged unit of competency to replace 11 units of competency) Industry Skills Council (ISC) upgrade to update unit lists and correct typographical errors
Release 1.1	April 2015	Industry Skills Council (ISC) upgrade to correct mapping errors
Release 1.0	March 2015	Primary release of restructured training package This release of the ICP Printing and Graphic Arts Training Package contains 16 Qualifications, 1 Skill Set, 288 native Units of Competency (including 286 units that have been updated for the Standards for Training Packages and 2 new units), and 167 imported units Digital literacy qualification and skill set added

Credit Arrangements

Links

Companion Volume Implementation Guides are available from VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

ICPSS00001 Digital Fundamentals skill set

Modification History

Release	Comments
Release 1	This skill set first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Description

This skill set comprises a set of units of competency which aim to develop underpinning digital literacy skills.

Pathways Information

These units of competency provide credit towards Certificate III and Certificate IV qualifications in ICP Printing and Graphic Arts, and many other qualifications across multiple training packages.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this skill set at the time of publication.

Skill Set Requirements

- ICPPRN497 Work with digital information
- ICPPRN385 Apply software applications to digital production

Target Group

Existing workers in the printing industry who need to develop skills in working with digital information.

Suggested words for Statement of Attainment

These units meet the requirements for fundamental digital literacy skills in the printing and graphic arts context.

ICPSS00002 3D Print Fundamentals Skill Set

Modification History

Release	Comments
Release 2	This version was released with ICP Printing and Graphic Arts Training Package Version 3.0. Updates to the units of competency required.
Release 1	This skill set first released with ICP Printing and Graphic Arts Training Package Version 2.0.

Description

This skill set describes the skills and knowledge required to perform fundamental three-dimensional (3D) printing.

Pathways Information

The units provide credit towards ICP31215 Certificate III in Printing and ICP31315 Certificate III in Print Manufacturing.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this skill set at the time of publication.

Skill Set Requirements

- BSBIPR401 Use and respect copyright
- ICPPTD301 Manipulate 3D files in preparation for 3D printing
- ICPPTD302 Set up and produce 3D prints
- ICPPTD303 Set up and produce 3D scans
- ICPPTD304 Apply problem solving techniques to 3D printing maintenance and operation

Target Group

This skill set is suitable for experienced printers and 3D print specialists.

Suggested words for Statement of Attainment

These units of competency from the ICP Printing and Graphic Arts Training Package meet broad industry and community requirements for the development and application of fundamental 3D printing skills.

ICPSS00003 Digital Colour Skill Set

Modification History

Release	Comments
Release 1	This skill set first released with ICP Printing and Graphic Arts Training Package Version 2.0.

Description

This skill set describes the skills and knowledge required to perform basic digital colour work.

Pathways Information

These units of competency provide credit towards ICP31215 Certificate III in Printing.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this skill set at the time of publication.

Skill Set Requirements

- ICPPRN284 Use colour management systems
- ICPPRN285 Use digital workflow
- ICPPRN384 Set up and produce basic digital print
- ICPPRN389 Manage digital files
- ICPPRN390 Generate a proof for digital production

Target Group

Experienced printers and entry level digital printers.

Suggested words for Statement of Attainment

These units of competency from the ICP Printing and Graphic Arts Training Package meet broad industry and community requirements for the development and application of basic digital colour work.

ICPSS00004 Advanced Digital Colour Skill Set

Modification History

Release	Comments
Release 1	This skill set first released with ICP Printing and Graphic Arts Training Package Version 2.0.

Description

This skill set describes the skills and knowledge required to perform advanced digital colour work.

Pathways Information

These units of competency provide credit towards ICP31215 Certificate III in Printing.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this skill set at the time of publication.

Skill Set Requirements

- ICPPRN382 Produce and manage complex digital print
- ICPPRN387 Use colour management for production
- ICPPRN495 Set up and use complex colour management for production
- ICPPRN496 Set up and produce complex digital print
- ICPPRP430 Manage colour

Target Group

Experienced printers and advanced digital printers.

Suggested words for Statement of Attainment

These units of competency from the ICP Printing and Graphic Arts Training Package meet broad industry and community requirements for the development and application of advanced digital colour work.