



Australian Government

Department of Education, Employment and Workplace Relations

ICTTEN2218A Operate new media software packages

Release: 1

ICTTEN2218A Operate new media software packages

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge to operate media software packages and supporting hardware to produce a media design. It involves selection and appraisal of media software tools, assessment and manipulation of software functions. It also involves use and creation of graphics and editing media files. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement but users should confirm requirements with the relevant federal, state or territory authority.
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Application of the Unit

Application of the unit	The unit provides an introduction to the use of media software packages for people wanting to be employed in the multimedia production area. It may eventually lead to employment in graphic design, industrial design, production of promotional and marketing media material.
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Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify relevant new media software and supporting hardware to meet a design brief	1.1. Perform the media work in a safe manner to comply with occupational health and safety (OHS) criteria and accepted industry practice 1.2. Identify the basic requirements of a media design brief , including user environment from customer specifications 1.3. Research and review new media software and hardware available to realise the design requirements 1.4. Select a new media software program to meet design brief requirements 1.5. Identify relevant new media hardware to support design brief requirements 1.6. Select, re-encode and transcode relevant file formats to process and modify digital media files to suit user application
2. Develop a new media graphic design	2.1. Review design brief to ensure customer requirements are well interpreted 2.2. Procure or create suitable graphics , video or sound to meet requirements of design brief 2.3. Manipulate graphics, video or sound using freely available software tools for evaluating the capabilities and limitations of different software packages 2.4. Produce a media design according to customer specifications and save the new media files using the designated file formats
3. Review new media design	3.1. Evaluate media design for creative, dramatic and technical quality , file size, and data suitability to meet the brief 3.2. Test and run graphics, video and sound of the media design as part of a multimedia presentation and present designs in the appropriate format

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

REQUIRED SKILLS AND KNOWLEDGE**Required skills**

- communication skills to work with others in a team
- literacy skills to read and interpret technical information and software specifications
- numeracy skills to size objects in computer assisted design (CAD)
- PC skills to load software and apply written keyboard instructions
- problem solving skills to clarify and solve unpredictable software and user environment problems that may arise
- technical skill to :
 - accurately incorporate workflow and stakeholder input
 - investigate, analyse and evaluate new media software requirements
 - manipulate digital photographs, images, videos and sound
 - use and configure new media hardware
 - use new media software programs
 - use software tools to develop, edit and test design
 - use visual design techniques

Required knowledge

- functions and features of two new media applications
- graphic design and stylistic language conventions
- software tools to develop, edit and test design
- the principles of:
 - digital imaging and file formats
 - file management and
 - transfer systems
 - video and sound file formats
 - visual design principles
- vendor product directions in new media hardware and software
- visualisation and interpreting creative information, scripts (text) and images

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

Evidence of the ability to:

- evaluate new media software
- manipulate files effectively
- produce a media design using two new media software packages
- evaluate design
- test and run design.

Context of and specific resources for assessment

Assessment must ensure:

- work stations with appropriate software tools loaded
- media capable PCs
- peripheral media equipment with HD capability
- LAN with media server
- internet access.

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:

- direct observation of the candidate operating new media software
- oral or written questioning to assess knowledge of media applications and required knowledge
- review of new media graphic designs and presentations prepared by the candidate.

Guidance information for assessment

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

Aboriginal people and other people from a non-English speaking background may have second language issues.

Access must be provided to appropriate learning and assessment support when required.

EVIDENCE GUIDE

	Assessment processes and techniques must be culturally appropriate, and appropriate to the oral communication skill level, and language and literacy capacity of the candidate and the work being performed. In all cases where practical assessment is used it will be combined with targeted questioning to assess required knowledge. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. Where applicable, physical resources should include equipment modified for people with special needs.
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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.

OHS criteria may include:

- correct posture
- ergonomic desk and chair
- length of time in front of computer
- light position
- lighting
- repetitive strain injury prevention
- type of monitor
- typing position
- ventilation.

Requirements of a media design brief may include:

- animation
- application
- format:
 - audio
 - graphic

RANGE STATEMENT	
	• images • video • length • protocol • resolution or definition: • high definition (HD) • standard definition (SD) • type of production.
User environment may include:	• home theatre • internet protocol TV (IPTV) • iTunes • UTube • media player • mobile devices • Web.
Customer specifications may refer to material for:	• advertising campaign • animation • magazine • marketing • multimedia • point of sale • promotion • promotional material • sales brochure • theatre production • video clip • Web promotion material.
Software may include:	• animation software: • 3D Studio Max • Cinema 4D • Houdini • Lightwave • Maya • Motionbuilder • Soft Image - XSI • graphics: • 3D Studio Max • Illustrator • Maya

RANGE STATEMENT

- Photoshop
- Softimage
- sound editor application:
 - Audacity
 - BroadWave Streaming Audio Server
 - DJ Audio Editor
 - Peak Pro
 - Power Sound editor
 - WavePad
 - Wavosaur
- type:
 - closed-source
 - online
 - open source
 - proprietary
- video encoding and conversion tools:
 - Apple QuickTime Pro
 - AutoGK
 - Avidemux
 - AVS Video converter
 - Cinema Craft Encoder
 - Encoding.com
 - Flix Cloud
 - FormatFactory
 - MediaCoder
 - MEncoder
 - Movavi
 - MP4Box
 - MPEG Streamclip
 - MythTV
 - Quick Media Converter
 - Total Video converter
 - VirtualDub
 - Zencoder
- video editing:
 - Adobe - Premier Pro, After effects, Encore
 - Apple - Final cut, iMovie
 - AviSynth

RANGE STATEMENT	
	• AVS video • Blender 3D - animation suite • LiVES • Media ComposerXpress Pro • Montage Extreme • MPEG Video Wizard • Pinnacle VideoSpin • Video ReDo Plus • VideoPad.
Hardware may include:	• Blu Ray player • digital camera • HD DVD • media player • MP3 player • MP4 Player • personal digital assistant (PDA) • scanners.
Re-encode may refer to:	• editing • image scaling or transsizing • lower bit rate or transrating.
Transcode may refer to:	• content adaptation • data conversion • data migration • different operating system • different platform • reducing disk space.
File formats may include:	• audio: • lossy compression: • AAC • AC3 • MP3 • Musepack • RealAudio • Vorbis • WMA • lossless compression: • ALAC • ALAC

RANGE STATEMENT	
	• APE • FLAC • OGG • SHN • WV • uncompressed: • AIFF • Au • WAV • video: • Dirac • Flash • MPEG-1 • MPEG-2 • MPEG-4 • Real Video • Snow • Theora • WMV.
Media files may include:	• graphics • HTML pages • movies • music • PDF files • pictures • text files • video.
User application may refer to:	• applying special effects: • equalisation • fade • flange • noise reduction • reverb • converting • cutting files • mixing • storing using different format • video and sound editing.

RANGE STATEMENT	
Graphics may include:	• animations • artwork • icons • logos • rendering images • screenshots • styles • symbol and images • typography.
Software tools include:	• video and sound: • editor • video and sound converter • video and sound encoder.
Creative quality may include:	• creative design • interaction with other media formats • new and innovative ideas • novel approach • use of colour, sound and animation.
Dramatic quality may include:	• attention grabbing • effective • message clarity.
Technical quality may include:	• compatibility with most players • CPU usage • effective use of format to create design • file size • storage requirements • store and retrieve speed • use of protocols.
Data may include:	• graphics • images • screenshots • sound • text • video and icons.

Unit Sector(s)

Unit sector	Telecommunications
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Co-requisite units

Co-requisite units		

Competency field

Competency field	Telecommunications networks engineering
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