



Australian Government

**ICPKNW320 Apply knowledge and
requirements of information technology
systems in the printing industry**

Release: 1

ICPKNW320 Apply knowledge and requirements of information technology systems in the printing industry

Modification History

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

Application

This unit describes the skills and knowledge required to work in or deal with information technology systems in the printing industry.

It applies to individuals working in or dealing with information technology systems in the printing industry who have the ability to work as part 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 information technology in printing industry	1.1 Information technology terminology and vocabulary are used correctly 1.2 New technology and new work processes are monitored and implemented when required 1.3 Information technology trends within printing industry are monitored, on an ongoing basis, to inform personal work practices 1.4 International standards and open source standards are monitored for new developments and applied where appropriate 1.5 Issues involved in producing related print products with new technology are reflected in work practice 1.6 Understanding of issues such as security, archiving, backup

ELEMENT	PERFORMANCE CRITERIA
	and storage is used to inform work practice
2. Apply knowledge of government Acts and regulations	2.1 Basic principles and obligations involved in copyright, work health and safety (WHS), environmental protection, access and equity, and industrial awards are understood in relation to workplace
3. Apply knowledge of pre-press information technology systems	3.1 Basic principles and capabilities behind digital workflows and computer networks are used to inform work practices 3.2 Database and file management are considered as required 3.3 Different output settings and how they affect final printed product are reviewed as required 3.4 Different types of output required for different media and printing processes are reviewed and evaluated in production process where applicable 3.5 Server and server administration systems are reviewed and evaluated to inform work practices
4. Apply detailed knowledge of information technology in multimedia	4.1 Designs that are appropriate or inappropriate for multimedia are applied to development processes where applicable 4.2 Criteria for choosing visual, audio or text delivery for presenting information in both passive and interactive products are applied to development process where applicable 4.3 Differences between various markup languages and their application are investigated and applied to a range of suitable development work 4.4 Differences between various scripting languages and their application are investigated and applied to a range of suitable development work 4.5 Criteria for selecting graphic resolution and formats, and advantages and limitations of different formats, are applied to development process where applicable 4.6 Criteria for selecting audio formats for multimedia, and advantages and limitations of different formats, are applied to development process where applicable 4.7 Criteria for selecting video formats for multimedia, and advantages and limitations of different formats, are applied to development process where applicable 4.8 Criteria for selecting animation formats for multimedia, and advantages and limitations of different formats, are applied to development process where applicable

ELEMENT	PERFORMANCE CRITERIA
	4.9 Multimedia platforms and computer systems requirements for different multimedia products are investigated and applied to development process where applicable 4.10 Different software and operating systems for producing multimedia products are evaluated for different jobs 4.11 Features of effective navigation system for both passive and interactive products are identified and applied to development process where applicable 4.12 Effect of rapidly changing technology and how multimedia production needs to respond to it are explored
5. Apply knowledge of printing information technology systems	5.1 Types of information technology systems used in printing sector are identified and used to inform personal work practice 5.2 Database and file management are used as required 5.3 Automated workflow systems are used to inform work practice 5.4 Different output systems and technology are used to inform work practice
6. Apply knowledge of converting and finishing information technology systems	6.1 Types of information technology systems used in converting and finishing sector are identified and used to inform personal work practice 6.2 Automated workflow systems are used to inform work practice 6.3 Different dispatch and distribution systems are evaluated and used to inform work practice
7. Demonstrate knowledge of production management systems	7.1 Types of information that need to be exchanged between different stages of production to facilitate production efficiency are identified and used to inform development decisions 7.2 Information technology systems that can be used to exchange information between companies and within companies are evaluated and used 7.3 Basic principles of efficient production management information systems are used to inform development decisions

Foundation Skills

This section 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, 4.2, 4.5-4.8, 5.2	Recognises and interprets text to establish the job requirements from information contained within relevant procedures and specifications
Oral Communication	1.1	Participates effectively in spoken interactions using correct technical and enterprise specific vocabulary
Navigate the world of work	1.2-1.5, 2.1	- Maintains knowledge of the printing industry required for current role - Complies with standards and legislative requirements - Follows organisational policies and procedures relevant to own role
Get the work done	1.2-1.6, 2.1, 2.2, 3.1-3.5, 4.1-4.12, 5.1-5.4, 6.1-6.3, 7.1-7.3	- Determines priorities and sequences the steps involved in clearly defined, familiar tasks and aims to achieve them efficiently - Identifies and assembles the resources required - Makes decisions by considering benefits, costs, risks and feasibility from a broad range of perspectives - Recognises the potential of new approaches to inform personal work practices - Responds to predictable problems and implements standard or logical solutions related to the role in the immediate work environment - Considers the strategic and operational potential of digital trends to achieve work goals and enhance work processes, and evaluates software functions for specific purposes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPKNW320 Apply knowledge and requirements of information technology systems in the printing industry	ICPKN320C Apply knowledge and requirements of information technology systems in the printing industry	Updated to 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 ICPKNW320 Apply knowledge and requirements of information technology systems in the printing industry

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Performance Evidence

Evidence of the ability to:

- use appropriate information technology vocabulary and terminology in written and oral communications with tradespeople, colleagues, management or clients
- keep up to date with information technology trends and standards in the printing industry
- apply relevant legislative and workplace requirements when completing tasks
- evaluate and review output settings, output requirements and server and server administration systems
- identify and use markup or scripting languages in development work
- select appropriate visual graphic, audio, video and animation formats in development work
- investigate and use information technology systems and software for 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 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 and capabilities behind digital workflows and computer networks
- describe the type of information technology systems used in the:
 - printing sector

- converting, binding and finishing sector
- 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 pre-press production
- explain the basic principles of efficient production management
- describe the types of information that need to be exchanged between different stages of 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 industry and include access to:

- special purpose tools, equipment and materials
- industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

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