



Australian Government

Department of Education, Employment and Workplace Relations

ICPKN320C Apply knowledge and requirements of information technology systems in the printing industry

Release: 1

ICPKN320C Apply knowledge and requirements of information technology systems in the printing industry

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to work in or deal with information technology systems in the printing industry; that is, a working knowledge of related information technology and a detailed knowledge of specific information technology systems in the printing industry. It facilitates technical communication and the ability to work as a team member.
------------------------	--

Application of the Unit

Application of the unit	This unit covers preparation of a person working in or dealing with information technology systems in the printing industry and underpins all multimedia units of competency in the ICP30305 Certificate III in Printing and Graphic Arts (Multimedia). Workers with the ICP30305 Certificate III in Printing and Graphic Arts (Multimedia) or higher are likely to acquire most of this knowledge in the technical units.
--------------------------------	---

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. Apply knowledge of information technology in the printing industry	1.1. Information technology terminology and vocabulary are used correctly and accurately 1.2. New technology and new work processes are monitored and implemented when required 1.3. Information technology trends within the 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 understood and applied where appropriate 1.5. The issues involved in producing related print products with new technology are understood and reflected in work practice 1.6. Issues such security, archiving, backup and storage are understood and used to inform work practice
2. Apply knowledge of government acts and regulations	2.1. Basic principles and obligations involved in copyright, OHS, environmental protection, access and equity and industrial awards are understood in relation to the workplace 2.2. The basic principles and obligations involved in copyright, OHS, environmental protection, access and equity and industrial awards are followed in personal work practices
3. Apply knowledge of pre-press information technology systems	3.1. Basic principles and capabilities behind digital workflows and computer networks are understood and used to inform work practices 3.2. Database and file management are understood and used as required 3.3. Different output settings and how they affect final printed product are understood and used as required 3.4. The different types of output required for different media and printing processes are understood and used in the production process where applicable 3.5. Server and server administration are understood and used to inform work practices
4. Apply detailed knowledge of information technology in multimedia	4.1. Designs that are appropriate or inappropriate for multimedia are understood and applied to the development process, where applicable 4.2. Criteria for choosing visual, audio or text delivery for presenting information in both passive and interactive products are understood and applied to the development process, where applicable 4.3. The differences between various markup languages

ELEMENT	PERFORMANCE CRITERIA
	and their application are understood and applied to a range of suitable development work 4.4. The differences between various scripting languages and their application are understood and applied to a range of suitable development work 4.5. The criteria for selecting graphic resolution and formats and advantages and limitations of different formats are understood and applied to the development process, where applicable 4.6. Criteria for selecting audio formats for multimedia and advantages and limitations of different formats are understood and applied to the development process, where applicable 4.7. The criteria for selecting video formats for multimedia and advantages and limitations of different formats are understood and applied to the development process, where applicable 4.8. The criteria for selecting animation formats for multimedia and advantages and limitations of different formats are understood and applied to the development process, where applicable 4.9. Multimedia platforms and computer systems requirements for different multimedia products are understood and applied to the development process, where applicable 4.10. Different software and operating systems for producing multimedia products are evaluated for different jobs 4.11. The features of an effective navigation system for both passive and interactive products are understood and applied to the development process, where applicable 4.12. The effect of rapidly changing technology and how multimedia production needs to respond to it are understood

ELEMENT	PERFORMANCE CRITERIA
5. Apply knowledge of printing information technology systems	5.1.The types of information technology systems used in the printing sector are understood and used to inform personal work practice 5.2.Database and file management are understood and used as required 5.3.Automated workflow systems are understood and used to inform work practice 5.4.Different output systems and technology are understood and used to inform work practice
6. Apply knowledge of converting and finishing information technology systems	6.1.The types of information technology systems used in the converting and finishing sector are understood and used to inform personal work practice 6.2.Automated workflow systems are understood and used to inform work practice 6.3.Different dispatch and distribution systems are understood and used to inform work practice
7. Demonstrate knowledge of production management systems	7.1.The types of information that need to be exchanged between different stages of production to facilitate production efficiency are understood and used to inform development decisions 7.2.Information technology systems that can be used to exchange information between companies and within companies are understood and used 7.3.The basic principles of efficient production management information systems are understood and inform development decisions

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- communication of ideas and information by correctly and accurately using information technology terminology and vocabulary
- collecting, analysing and organising information by understanding and applying basic principles and obligations of OHS in the workplace
- planning and organising activities by understanding and using basic principles and capabilities behind digital workflows and computer networks in work practices
- teamwork when understanding and using issues such as security, archiving, backup and storage in work practices
- mathematical ideas and techniques by understanding and applying the criteria for selecting graphic resolution to the development process
- problem-solving skills by evaluating software and operating systems when producing multimedia for different jobs
- use of technology by understanding and applying to the development process, where applicable, multimedia platforms and computer systems requirements for different multimedia products

Required knowledge

- unit underpins all technical Certificate III level units of competency

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 following is essential:

- assessor must be satisfied that sufficient knowledge and understanding of information technology systems and related production processes (as outlined in each Element) have been demonstrated so that job procedures, requirements and modifications can be intelligently discussed in some detail with a tradesperson, programmer, technician, production manager or client
- demonstrated competency in Certificate III level Information Technology units of competency
- evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity.

Context of and specific resources for assessment

Assessment must ensure:

- assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

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 questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate.

Guidance information for assessment

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

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>Level of knowledge</i> may include:	knowledge required to intelligently discuss job procedures, requirements and modifications with a tradesperson, production manager or client.

Unit Sector(s)

Unit sector	
-------------	--

Competency field

Competency field	Holistic Knowledge
------------------	--------------------

Co-requisite units

Co-requisite units		