ICTICT411 Select and employ software and hardware testing tools

Release: 1

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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 select and use software and hardware diagnostic and testing tools.

It applies to individuals in a wide range of information and communications technology (ICT) areas who are required to test software and hardware.

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

Unit Sector

General ICT

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Establish process operational requirements	1.1 Identify process requirements, ensuring they are accurate, complete, prioritised, have functionality, and reference appropriate method or media types 1.2 Identify conflicting or overlapping requirements 1.3 Document and validate functional requirements of the client 1.4 Identify and validate available resources and budget
2. Select hardware and software for processing function	2.1 Identify and evaluate relevant hardware and software tools with reference to functional requirements 2.2 Identify and analyse relevant products and equipment interdependencies with reference to functional requirements and

ELEMENT	PERFORMANCE CRITERIA
	system architecture
	2.3 Identify and document appropriate tools, including their limitations for the required use and industry standards
	2.4 Select and acquire tools according to purchasing policies
3. Configure and test hardware and software	3.1 Install and configure appropriate hardware and software tools according to vendor guidelines with reference to system architecture and client functionality requirements
	3.2 Configure system architecture for optimal usage
	3.3 Prepare, schedule and execute tests and record outcomes
	3.4 Track errors, and interpret and correct them
	3.5 Make changes to the tested hardware or software based on test results
	3.6 Document the hardware and software configuration according to requirements
4. Use and validate software and hardware	4.1 Provide appropriate training of client with reference to guides, instructions and vendor materials
	4.2 Use hardware and software according to vendor guidelines
	4.3 Validate hardware and software performance with reference to client functional 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, 1.4, 2.1, 2.4, 3.1, 3.3-3.5, 4.2	• Identifies and comprehends a large range of complex textual and diagrammatic information with systems related terminology to determine organisational requirements and standards, and select appropriate tools and processes
Writing	1.3, 2.3, 2.4, 3.1-3.3, 3.6	• Uses correct spelling and grammar together with relevant systems related terminology to document progress and results, and develop user documentation • Converts jargon, terminology and acronyms into

		plain English
		• Uses specific scripting and syntax to install, configure and program the system to user requirements
Oral communication	1.1, 1.2, 1.4, 2.1, 2.2, 3.3, 4.1	• Uses effective listening and questioning techniques and systems related terminology to elicit information about the systems and make the correct tool selection • Uses plain English and interprets technical terminology when liaising with clients and providing training
Numeracy	1.4, 2.4	• Performs mathematical calculations to interpret complex financial information
Interact with others	4.1	• Shares information and resources, provides training voluntarily and feedback to client when required
Navigate the world of work	2.3	• Recognises and follows explicit and implicit protocols and meets expectations associated with own role
Get the work done	1.1, 1.2, 1.4, 2.1-2.4, 3.1-3.4, 3.5, 4.2, 4.3	• Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency • Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks • Initiates standard diagnostic procedures when responding to familiar and unfamiliar problems within immediate context

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTICT411 Select and employ software and hardware testing tools	ICAICT411A Select and employ software and hardware testing tools	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e 9d6aff2