



Australian Government

Department of Education, Employment and Workplace Relations

UEE50110 Diploma of Computer Systems Engineering

Release: 1

UEE50110 Diploma of Computer Systems Engineering

Modification History

Not Applicable

Description

Scope

This qualification provides competencies to develop, select, install, commission and maintain computer equipment and systems.

Pathways Information

Not Applicable

Licensing/Regulatory Information

Not Applicable

Entry Requirements

Not Applicable

Employability Skills Summary

Not Applicable

Packaging Rules

Completion requirements

The requirements for granting this qualification will be met when competency is demonstrated and achieved for:

- All the Core competency standard units, **and**
- A combination of Elective competency standard units selected from Group A, B, C and/or Group D to achieve a total weighting of 1460 points, **and**
- All the required pre-requisite competency standard units have been met as required.

Core Competency Standard Units		Weighting Points
All Core competency standard units to be achieved		
UEENEED044B	Commission computer systems	20
UEENEED045B	Modify-redesign of computer system	20
UEENEEE001B	Apply OHS practices in the workplace	20
UEENEEE017B	Implement and monitor OHS policies and procedures	20
UEENEEE032B	Document occupational hazards and risks in computer systems	20
UEENEEE038B	Participate in development and follow a personal competency development plan	20
UEENEEK045A	Implement&monitor, policies&procedures for environmentally sustainable electrotech work practice	20
Total points in core		140

Elective Competency Standard Units			
Complete Elective units to achieve a total of weighting of 1460 points from the following groups:			
Group		Minimum points	Maximum points
A	Imported and Common Elective Units	0	270
	Imported units from other training packages and/or state accredited courses can be added to this group, but they		

Elective Competency Standard Units

Complete Elective units to achieve a total of weighting of 1460 points from the following groups:

	must be selected from qualifications where the unit is first packaged at AQF level 5. If units have not being assigned a weighting in the Electrotechnology Training Package, their weighting will be 10 points.		
B	Qualification Electives - Schedule 3 Units	0	900
C	Qualification Electives - Schedule 4 Units	0	580
D	Qualification Electives - Schedule 5 Units You may select the majority of your elective units from this Group	580	1460

Group A - Imported and Common Elective Units		Weighting Points
BSBMGT502B	Manage people performance	70
BSBINM501A	Manage an information or knowledge management system	50
BSBMGT516C	Facilitate continuous improvement	60
BSBINN502A	Build and sustain an innovative work environment	50
BSBWOR502B	Ensure team effectiveness	60
UEENEEC001B	Maintain documentation	20
UEENEEC002B	Source and purchase material/parts for installation or service jobs	20
UEENEEC003B	Provide quotations for installation or service jobs	20
UEENEEC010B	Deliver a service to customers	20
UEENEE001B	Use basic computer applications relevant to a workplace	20
UEENEEE009B	Comply with scheduled and preventative maintenance program processes	20
UEENEEE020B	Provide basic instruction in the use of	20

Group A - Imported and Common Elective Units		Weighting Points
	electrotechnology apparatus	
	Imported units from other training packages and/or state accredited courses can be added to this group, but they must be selected from qualifications where the unit is first packaged at AQF level 5. If units have not being assigned a weighting in the Electrotechnology Training Package, their weighting will be 10 points. Note: For further information see <i>Transition to NQC Packaging Rules for Flexibility</i>, Page 48, UEE07 Electrotechnology Training Package, Version 4, Volume 1 Preliminary Information.	Up to 270 points

Group B - Qualification Electives - Schedule 3 Units		Weighting Points
UEENEEA001B	Assemble electronic apparatus	40
UEENEEA002B	Select electronic components	20
UEENEEA004B	Rework electronic sub assemblies	40
UEENEEA006B	Apply lead-free soldering techniques	40
UEENEED002B	Assemble, set up and test personal computers	80
UEENEED004B	Use engineering applications software	40
UEENEED005B	Enter and verify operating instructions in microprocessor equipped devices	20
UEENEED012B	Support computer hardware and software	120
UEENEED029B	Develop basic web pages for engineering applications	40
UEENEED030B	Select, install, configure and test multimedia devices	40
UEENEED031B	Develop and validate basic integrated systems	60
UEENEED043B	Install and configure a computer operating system and software	40
UEENEED046B	Set up and configure basic local area network	40
UEENEED053B	Set up and test biometric devices	40
UEENEEE002B	Dismantle, assemble and fabricate electrotechnology components	40
UEENEEE003B	Solve problems in extra-low voltage single path circuits	40
UEENEEE004B	Solve problems in multiple path d.c. circuit)	40
UEENEEE005B	Fix and secure equipment	20
UEENEEE007B	Use drawings, diagrams, schedules and manuals	40
UEENEEE008B	Lay wiring/cabling and terminate accessories for extra-low voltage circuits	40

Group B - Qualification Electives - Schedule 3 Units		Weighting Points
UEENEEE019C	Solve problems in multiple path a.c. circuits	40
UEENEEE023B	Solve basic problems in electronic and digital equipment	80
UEENEEE046B	Identify affects of energy on machinery and materials in an electrotechnology environment	120
UEENEEE048C	Carry out routine work activities in an electrotechnology environment	40
UEENEEE050B	Undertake computations in an electrotechnology environment	120
UEENEEE079B	Identify and select components, accessories and materials for electrotechnology work activities	20
UEENEEF002B	Lay and connect cables for multiple access to telecommunication services	120
UEENEEF004B	Install and modify performance data communication structured cabling	40
UEENEEF005B	Install and modify performance data communication optical fibre cabling	40
UEENEEF007B	Set up wireless capabilities of communications and data storage devices	40
UEENEEF008B	Select and arrange equipment for wireless networks	60
UEENEEF009B	Install and connect voice and data communications equipment	60
UEENEEF010B	Select and arrange equipment for local area networks	120
UEENEEH001B	Carry out basic repairs to computer equipment by replacement of modules/sub-assemblies	40
UEENEEH002B	Carry out basic repairs to electronic apparatus by replacement of components	40
UEENEEH003B	Carry out routine repairs to business equipment	120
UEENEEH011B	Troubleshoot d.c. power supplies with single phase	40

Group B - Qualification Electives - Schedule 3 Units		Weighting Points
	input	
UEENEEH012B	Troubleshoot digital subsystems	80
UEENEEH013B	Troubleshoot amplifiers	80
UEENEEH014B	Troubleshoot frequency dependent circuits	80
UEENEEH015B	Develop software solutions in microcontroller based systems	60
UEENEEH039B	Troubleshoot basic amplifiers	40
UEENEEH050B	Assemble and set up basic wired and wireless security systems	80
UEENEEH051B	Install large wired and wireless security systems	100
UEENEEH052B	Enter instructions and test basic wired and wireless security systems	40
UEENEEH066B	Fault find Microcontroller based hardware	40
UEENEEH069B	Solve problems in electronic circuits	100
UEENEEI001B	Install and set up transducers and sensing devices	40

Group C - Qualification Electives - Schedule 4 Units		Weighting Points
UEENEEC004B	Prepare specifications for the supply of materials and equipment for electrotechnology projects	40
UEENEEC005B	Estimate electrotechnology projects	40
UEENEE003B	Evaluate and modify programs written in object oriented code	40
UEENEE010B	Set up and create content for a web server	120
UEENEE013B	Install and administer Unix based computers	80
UEENEE015B	Administer user networks	80
UEENEE017B	Install and configure internetworking systems	120

Group C - Qualification Electives - Schedule 4 Units		Weighting Points
UEENEED024B	Integrate multiple computer operating systems on a client server network	80
UEENEED027B	Develop structured programs to control external devices	40
UEENEED032B	Design integrated systems	60
UEENEED033B	Design complex integrated systems	60
UEENEED034B	Configure and maintain industrial control system networks	60
UEENEED054B	Analyse and implement biometric techniques and applications	120
UEENEEE010B	Develop and implement maintenance programs	60
UEENEEE014B	Supervise and coordinate work activities	40
UEENEEE024C	Compile and produce an electrotechnology report	60
UEENEEH044B	Diagnose and rectify faults in analogue circuits and components in electronic control systems	60
UEENEEH057B	Develop basic integrated security systems plan	40

Group D - Qualification Electives - Schedule 5 Units		Weighting Points
You may select the majority of your elective units from this Group		
UEENEED006B	Prepare tender submissions for electrotechnology projects	60
UEENEED011B	Develop object oriented code	140
UEENEED018B	Design and implement internetworking systems	120
UEENEED025B	Design and configure Human-Machine Interface networks	60
UEENEED028B	Develop and test code for microcontroller devices	60
UEENEED050B	Develop control programs for microcomputer	60

Group D - Qualification Electives - Schedule 5 Units You may select the majority of your elective units from this Group		Weighting Points
	equipped devices	
UEENEED051B	Provide programming solution for engineering problems	60
UEENEEE015B	Develop design briefs for electrotechnology projects	40
UEENEEE025B	Solve problems in complex multiple path circuits	60
UEENEEE026B	Provide computational solutions to basic engineering problems	40
UEENEEE070B	Write specifications for computer systems engineering projects	40
UEENEEH045B	Develop solutions to analogue electronic problems	80
UEENEEH048B	Design and develop advanced digital systems	40
UEENEEH081B	Design printed circuit boards	40
UEENEEH083B	Analyse the performance of wireless-based electronic systems	40

Note: 1. Pre-requisite pathways shall be identified and met for all elective units selected.

2. In selecting elective units considerations to career planning advice should be given to units that form part of a pre-requisite pathway for the progression to achieve particular competencies or qualification at a higher level.

3. Registered training organisations shall provide competency development advice in relation to any licensing requirements to practice that apply, or can contribute towards the qualification requirement, prior to establishing the competency development plan.

END OF QUALIFICATION