



**Australian Government**

# **UEE30911 Certificate III in Electronics and Communications**

**Release 5**

## UEE30911 Certificate III in Electronics and Communications

### Modification History

Release	Action	Core/Elective	Details	Points
2	Add	Group B	UEENEOP012A Disconnect / reconnect composite appliances connected to low voltage installation wiring	60
2	Add	Group B	UEENEOP017A Locate and rectify faults in low voltage composite appliances using set procedures	20
2	Add	Group B	UEENEEI150A Develop, enter and verify discrete control programs for programmable controllers	60
2	Update	Group A	HLTFA311A Apply first aid	10
2	Edit		Edit Name to reflect correct Unit title UEENEED104A Use engineering applications software on personal computers	40
2	Update	Group A	MSS402001A Apply competitive systems and practices	20
2	Update	Group A	MSS402021A Apply Just in Time procedures	20
2	Update	Group A	MSS402080A Undertake root cause analysis	20
2	Update	Group A	MSS402081A Contribute to the application of a proactive maintenance strategy	20
2	Update	Group A	MSS402040A Apply 5S procedures	20
2	Update	Group A	MSS402020A Apply quick changeover procedures	20
3	Remove	Group B	UEENEEH189A Provide Gate Array solutions for complex electronics systems	60
3	Add	Group B	UEENEOP010A Disconnect / reconnect appliances connected to low voltage installation wiring.	60

4	Edit	Elective	Correct weighting points of UEENEED146A - Set up and configure basic local area network (LAN)	40
5	Update	Elective	HLTAID003 - Provide first aid	10
5	Edit	Core	Correct title of UEENEEK142A - Apply environmentally and sustainable procedures in the energy sector	20
5	Edit	Elective	Correct title of UEENEEH117A - Carry out repairs of predictable faults in video and audio replay/recording apparatus	120
5	Edit	Elective	Correct title of UEENEEH174A - Troubleshoot audio - video recording equipment	120
5	Edit	Elective	Correct title of UEENEEP010A - Disconnect - reconnect appliances connected to low voltage installation wiring	60
5	Edit	Elective	Correct title of UEENEEP025A - Attach cords, cables and plugs to electrical equipment for connection to 1000 V.a.c. or 1500 V.d.c. supply	20

## Description

### Scope

This qualification provides competencies to select, install, set up, test, fault find, repair and maintain electronic equipment and devices at component/sub-assembly level with options in communications, audio, video and TV, personal computer and networks, security and custom installations

## 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, defined in the Core Competency Standard Units table below and
- A combination of Elective competency standard units to achieve a total weighting of 380 points in accordance with the Elective Competency Standard Units table below.

<b>Core Competency Standard Units</b>		<b>Weighting Points</b>
All Core competency standard units to be achieved		
UEENEEC021B	Participate in electronics and communications work and competency development activities	60
UEENEEE101A	Apply Occupational Health and Safety regulations, codes and practices in the workplace	20
UEENEEE102A	Fabricate, assemble and dismantle utilities industry components	40
UEENEEE104A	Solve problems in d.c. circuits	80
UEENEEE137A	Document and apply measures to control OHS risks associated with electrotechnology work	20
UEENEEH102A	Repairs basic electronic apparatus faults by replacement of components	40
UEENEEH111A	Troubleshoot single phase input d.c. power supplies	40
UEENEEH112A	Troubleshoot digital sub-systems	80
UEENEEH113A	Troubleshoot amplifiers in an electronic apparatus	80
UEENEEH114A	Troubleshoot resonance circuits in an electronic apparatus	80
UEENEEH138A	Fault find and repair complex power supplies	40
UEENEEH139A	Troubleshoot basic amplifier circuits	40
UEENEEH146A	Solve fundamental electronic communications system problems	40
UEENEK142A	Apply environmentally and sustainable procedures in	20

<b>Core Competency Standard Units</b>		<b>Weighting Points</b>
All Core competency standard units to be achieved		
	the energy sector	
<b>Total points in core</b>		<b>680</b>

<b>Elective Competency Standard Units</b>			
Complete Elective units to achieve a total of weighting of 380 points from the following groups:			
<b>Group</b>		<b>Minimum points</b>	<b>Maximum points</b>
<b>A</b>	<b>Imported and Common Elective Units</b> 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 3. If units have not being assigned a weighting by the relevant EE-Oz Industry Technical Advisory Committee, their weighting will be 10 points.	0	180
<b>B</b>	<b>Qualification Elective Units</b> You may select all your elective units from this Group	200	380

<b>Group A – Imported and Common Elective Units</b>		<b>Weighting Points</b>
You may complete units to a maximum weighting of 180		
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
UEENEED101A	Use computer applications relevant to a workplace	20
UEENEED009B	Comply with scheduled and preventative maintenance program processes	20
UEENEED020B	Provide basic instruction in the use of	20

	electrotechnology apparatus	
HLTAID003	Provide first aid	10
ICTTEN3056A	Install telecommunications network equipment	40
MSS402001A	Apply competitive systems and practices	20
MSS402020A	Apply quick changeover procedures	20
MSS402021A	Apply Just in Time procedures	20
MSS402040A	Apply 5S procedures	20
MSS402080A	Undertake root cause analysis	20
MSS402081A	Contribute to the application of a proactive maintenance strategy	20
	<p>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 3. If units have not being assigned a weighting by the relevant EE-Oz Industry Technical Advisory Committee, their weighting will be 10 points.</p> <p>Note: For further information see Application of the NQC Flexibility Formula, UEE11 Electrotechnology Training Package, Version 1, Volume 1 Qualification Framework</p>	Up to 180 points

<b>Group B – Qualification Elective Units</b>		<b>Weighting Points</b>
Complete units to a minimum weighting of 200 You may select all your elective units from this Group		
UEENEEA101A	Assemble electronic components	40
UEENEEA102A	Select electronic components for assembly	20
UEENEEA103A	Set up and check electronic component assembly machines	40
UEENEEA104A	Modify electronic sub assemblies	40
UEENEEA105A	Conduct quality and functional tests on assembled electronic apparatus	20
UEENEEA106A	Use lead-free soldering techniques	40
UEENEEB101A	Operate and maintain amateur radio communication stations	40
UEENEEED102A	Assemble, set-up and test computing devices	80
UEENEEED104A	Use engineering applications software on personal computers	40
UEENEEED112A	Support computer hardware and software for engineering applications	120
UEENEEED129A	Develop web pages for engineering applications	40
UEENEEED130A	Select, install, configure and test multimedia components	40
UEENEEED143A	Install and configure a client computer operating system and software	40
UEENEEED146A	Set up and configure basic local area network (LAN)	40
UEENEEED153A	Set up, configure and test biometric devices	40
UEENEEEEE105A	Fix and secure electrotechnology equipment	20
UEENEEEEE107A	Use drawings, diagrams, schedules, standards, codes and specifications	40



UEENEEE108A	Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits	40
UEENEEE121A	Plan an integrated cabling installation system	40
UEENEEE122A	Carry out preparatory energy sector work activities	60
UEENEEE123A	Solve basic problems electronic and digital equipment and circuits	80
UEENEEE179A	Identify and select components, accessories and materials for energy sector work activities	20
UEENEEF102A	Install and maintain cabling for multiple access to telecommunication services	120
UEENEEF104A	Install and modify performance data communication copper cabling	40
UEENEEF105A	Install and modify optical fibre performance data communication cabling	40
UEENEEF106A	Solve problems in voice and data communications circuits	40
UEENEEF107A	Set up and configure the wireless capabilities of communications and data storage devices	40
UEENEEF108A	Select and arrange equipment for wireless communication networks	40
UEENEEF109A	Install and connect data and voice communication equipment	40
UEENEEF110A	Select and arrange data and voice equipment for local area networks	40
UEENEEF111A	Test, report and rectify faults in data and voice installations	40
UEENEEF114A	Set up and configure basic data communication systems	40
UEENEEH101A	Repair basic computer equipment faults by replacement of modules/sub-assemblies	40
UEENEEH103A	Repair routine business equipment faults	120

UEENEEH104A	Set up and test residential video/audio equipment	40
UEENEEH105A	Verify functionality and compliance of custom electronic installations	40
UEENEEH106A	Assemble and set up fixed video/audio components and systems in buildings and premises	120
UEENEEH107A	Repair predictable faults in general electronic apparatus	40
UEENEEH108A	Assemble and install reception antennae and signal distribution equipment	60
UEENEEH109A	Set up and test gaming and game equipment	60
UEENEEH110A	Install commercial video/audio system components	120
UEENEEH115A	Develop software solutions for microcontroller based systems	60
UEENEEH116A	Find and repair microwave amplifier section faults in electronic apparatus	40
UEENEEH117A	Carry out repairs of predictable faults in video and audio replay/recording apparatus	120
UEENEEH118A	Fault find and repair electronic apparatus	40
UEENEEH119A	Repair predictable faults in television receivers	120
UEENEEH120A	Fault find and repair gaming and games equipment	80
UEENEEH121A	Fault find and repair high volume office equipment	120
UEENEEH122A	Fault find and repair remote control apparatus	60
UEENEEH123A	Fault find and repair microwave heating apparatus	40
UEENEEH124A	Repair predictable faults in audio components	40
UEENEEH127A	Set up and adjust commercial radio frequency (RF) transmission and reception systems	60

UEENEEH128A	Install and test microwave antennae and waveguides	60
UEENEEH142A	Solve oscillator problems	40
UEENEEH150A	Assemble and set up basic security systems	80
UEENEEH151A	Install large security systems	100
UEENEEH152A	Enter instructions and test wired and wireless security systems	40
UEENEEH154A	Program and commission commercial security systems	60
UEENEEH155A	Program and commission commercial access control security systems	60
UEENEEH156A	Program and commission commercial security closed circuit television systems	60
UEENEEH161A	Install fire detection and warning system apparatus	40
UEENEEH162A	Verify compliance and functionality of fire protection system installations	60
UEENEEH163A	Enter and verify programs for fire protection systems	40
UEENEEH164A	Commission large fire protection systems	40
UEENEEH165A	Troubleshoot fire protection systems	40
UEENEEH166A	Troubleshoot microcontroller based hardware systems	40
UEENEEH169A	Solve problems in basic electronic circuits	100
UEENEEH171A	Troubleshoot faults in television receivers	120
UEENEEH172A	Troubleshoot communication systems	80
UEENEEH173A	Troubleshoot professional audio reproduction components	120
UEENEEH174A	Troubleshoot audio - video recording equipment	120
UEENEEH187A	Solve problems in electronic musical equipment	40

	circuits	
UEENEEI101A	Use instrumentation drawings, specification, standards and equipment manuals	40
UEENEEI116A	Assemble, enter and verify operating instructions in microprocessor equipped devices	20
UEENEEI117A	Calibrate, adjust and test measuring instruments	40
UEENEEI150A	Develop, enter and verify discrete control programs for programmable controllers	60
UEENEPE010A	Disconnect - reconnect appliances connected to low voltage installation wiring	60
UEENEPE012A	Disconnect / reconnect composite appliances connected to low voltage installation wiring	60
UEENEPE017A	Locate and rectify faults in low voltage composite appliances using set procedures	20
UEENEPE024A	Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt supply	20
UEENEPE025A	Attach cords, cables and plugs to electrical equipment for connection to 1000 Va.c. or 1500 Vd.c. supply	20

**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.

**END OF QUALIFICATION****Custom Content Section**

Not applicable.