



Australian Government

Department of Education, Employment and Workplace Relations

UEE30910 Certificate III in Electronics and Communications

Release: 1

UEE30910 Certificate III in Electronics and Communications

Modification History

Not Applicable

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:

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| <ul style="list-style-type: none"> All the Core competency standard units, and A combination of Elective competency standard units selected from Group A and/or Group B to achieve a total weighting of 380 points, and All the required pre-requisite competency standard units. <p>Core Competency Standard Units</p> <p>All Core competency standard units to be achieved</p> | | |
| UEENEEC021B | Participate in electronics and communications work and competency development activities | 60 |
| UEENEEE001B | Apply OHS practices in the workplace | 20 |
| 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. circuits | 40 |
| UEENEEE034B | Document occupational hazards and risks in electronics | 20 |
| UEENEEH002B | Carry out basic repairs to electronic apparatus by replacement of components | 40 |
| UEENEEH011B | Troubleshoot d.c. power supplies with single phase input | 40 |
| UEENEEH012B | Troubleshoot digital subsystems | 80 |
| UEENEEH013B | Troubleshoot amplifiers | 80 |

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| UEENEEH014B | Troubleshoot frequency dependent circuits | 80 |
| UEENEEH038B | Find and repair faults in complex power supplies | 40 |
| UEENEEH039B | Troubleshoot basic amplifiers | 40 |
| UEENEEH046B | Solve fundamental problems in electronic communications systems | 40 |
| UEENEEK042A | Participate in environmentally sustainable work practices | 20 |
| Total points in core | | 680 |

Elective Competency Standard Units

Complete Elective units to achieve a total of weighting of 380 points from the following groups:

| Group | | Minimum points | Maximum points |
|----------|--|----------------|----------------|
| A | Imported and Common Elective Units 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 in the Electrotechnology Training Package, their weighting will be 10 points. | 0 | 180 |
| B | Qualification Electives - Schedule 3 Units You may select all your | 200 | 380 |

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| | elective units from this Group | | |
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| Group A - Imported and Common Elective Units | | Weighting Points |
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| 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 |
| UEENEEC001B | 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 electrotechnology apparatus | 20 |
| ICTTEN3056A | Install telecommunications network equipment | 40 |
| MSACMS200A | Apply competitive manufacturing practices | 20 |
| MSACMT220A | Apply quick changeover procedures | 20 |
| MSACMT221A | Apply Just in Time (JIT) procedures | 20 |
| MSACMT240A | Apply 5S procedures in a manufacturing environment | 20 |
| MSACMT280A | Undertake root cause analysis | 20 |
| MSACMT281A | Contribute to the application of a proactive maintenance strategy | 20 |

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| | <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 in the Electrotechnology Training Package, their weighting will be 10 points.</p> <p>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.</p> | Up to 180 points |
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| Group B - Qualification Electives - Schedule 3 Units You may select all your elective units from this Group | | Weighting Points |
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| UEENEEA001B | Assemble electronic apparatus | 40 |
| UEENEEA002B | Select electronic components | 20 |
| UEENEEA003B | Set up and check electronic component placement machines | 40 |
| UEENEEA004B | Rework electronic sub assemblies | 40 |
| UEENEEA005B | Conduct functional and quality tests on assembled electronic apparatus | 20 |
| UEENEEA006B | Apply lead-free soldering techniques | 40 |
| UEENEED001B | Operate and maintain an amateur radio communication station | 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 |

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| UEENEED046B | Set up and configure basic local area network | 40 |
| UEENEED053B | Set up and test biometric devices | 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 |
| UEENEEE021B | Plan an integrated cabling system | 40 |
| UEENEEE022B | Carry out preparatory electrotechnology work activities | 60 |
| UEENEEE023B | Solve basic problems in electronic and digital equipment | 80 |
| UEENEEE041B | Use of routine equipment/plant/technologies in an electrotechnology environment | 60 |
| 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 |
| UEENEEE079A | Identify and select components, accessories and materials for electrotechnology work activities | 20 |
| UEENEED002B | Lay and connect cables for multiple access to telecommunication services | 120 |
| UEENEED004B | Install and modify performance data communication structured | 40 |

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| | cabling | |
| UEENEEF005B | Install and modify performance data communication optical fibre cabling | 40 |
| UEENEEF006B | Solve problems in data and voice communications circuits | 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 | 40 |
| UEENEEF010B | Select and arrange equipment for local area networks | 120 |
| UEENEEF011B | Test, report and rectify faults in voice and data installations | 60 |
| UEENEEF014B | Set up and configure basic data communications systems | 40 |
| UEENEEH001B | Carry out basic repairs to computer equipment by replacement of modules/sub-assemblies | 40 |
| UEENEEH003B | Carry out routine repairs to business equipment | 120 |
| UEENEEH004B | Set up and test residential audio/video equipment | 40 |
| UEENEEH005B | Verify compliance and functionality of custom electronic installations | 40 |
| UEENEEH006B | Assemble and set up fixed audio/video components and systems in buildings and premises | 120 |
| UEENEEH007B | Carry out repairs of predictable | 40 |

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| | faults in general electronic apparatus | |
| UEENEEH008B | Assemble and erect reception antennae and signal distribution equipment | 60 |
| UEENEEH009B | Set up and test gaming/games equipment | 60 |
| UEENEEH010B | Install commercial audio/video system components | 120 |
| UEENEEH015B | Develop software solutions in microcontroller based systems | 60 |
| UEENEEH016B | Find and repair faults in the microwave amplifier sections of electronic apparatus | 40 |
| UEENEEH017B | Carry out repairs of predictable faults in audio and video replay/recording apparatus | 120 |
| UEENEEH018B | Find and repair faults in electronic apparatus | 40 |
| UEENEEH019B | Carry out repairs of predictable faults in television receivers | 120 |
| UEENEEH020B | Find and repair faults in gaming and games equipment | 80 |
| UEENEEH021B | Find and repair faults in high volume office equipment | 120 |
| UEENEEH022B | Find and repair faults in remote control apparatus | 60 |
| UEENEEH023B | Find and repair faults in microwave heating apparatus | 40 |
| UEENEEH024B | Carry out repairs of predictable faults in audio components | 40 |
| UEENEEH027B | Commission commercial radio frequency (RF) transmission and reception systems | 60 |

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| UEENEEH028B | Install microwave and antennae and waveguides | 60 |
| UEENEEH042B | Troubleshoot oscillators | 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 |
| UEENEEH054B | Program and commission commercial security alarm systems | 60 |
| UEENEEH055B | Program and commission commercial security access control systems | 60 |
| UEENEEH056B | Program and commission commercial security closed circuit television (CCTV) systems | 60 |
| UEENEEH061B | Position and terminate fire detection and warning system apparatus | 40 |
| UEENEEH062B | Verify compliance and functionality of fire protection installations | 60 |
| UEENEEH063B | Enter and verify programs in preparation for commissioning fire protection systems | 40 |
| UEENEEH064B | Commission commercial fire protection systems | 40 |
| UEENEEH065B | Find and repair faults in fire protection systems | 40 |
| UEENEEH066B | Fault find Microcontroller based hardware | 40 |

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| UEENEEH069B | Solve problems in electronic circuits | 100 |
| UEENEEH070B | Terminate and connect components, conductors, wiring and cables for electronic circuits | 40 |
| UEENEEH071B | Find and repair faults in television receivers | 120 |
| UEENEEH072C | Find and repair faults in communication systems | 80 |
| UEENEEH073B | Find and repair faults in professional audio reproduction components | 120 |
| UEENEEH074B | Find and repair faults in audio/video recording equipment | 120 |
| UEENEEH087B | Solve problems in musical equipment circuits | 40 |
| UEENEEI001B | Install and set up transducers and sensing devices | 40 |
| UEENEEI017B | Calibrate and test measuring instruments | 40 |
| UEENEPP008B | Conduct in-service safety testing of electrical cord assemblies and cord connected equipment | 20 |
| UEENEPP024A | Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt 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
