



Australian Government

UEE43211 Certificate IV in Industrial Automation and Control

Release: 4

UEE43211 Certificate IV in Industrial Automation and Control

Modification History

Release	Action	Core/Elective	Details	Points
2	Edit		Edit Name to reflect correct Unit title UEENEED104A Use engineering applications software on personal computers	40
2	Update	Group A	HLTCPR211A Perform CPR	10
	Update	Group A	Edit Unit Code to reflect correct Unit Code TLILIC2001 Licence to operate a forklift truck	40

3	Edit	Group B	Edit Name to reflect correct Unit title UEENEEI102A Solve problems in pressure measurement components and systems	40
3	Edit	Group B	Edit Name to reflect correct Unit title UEENEEI103A Solve problems in density_level measurement components and systems	40
3	Edit	Group B	Edit Name to reflect correct Unit title UEENEEI104A Solve problems in flow measurement components and systems	40
3	Edit	Group B	Edit Name to reflect correct Unit title UEENEEI105A Solve problems in temperature measurement components and systems	40
3	Edit	Group B	Edit Name to reflect correct Unit title UEENEEI106A Set up and adjust PID control loops	40
3	Edit	Group B	Edit Name to reflect correct Unit title UEENEEI110A Set up and adjust advanced PID process control loops	40
3	Edit	Group C	Edit Name to reflect correct Unit title UEENEEI151A Develop, enter and verify word and analogue control programs for programmable logic controllers.	60

3	Edit	Core	Edit Name to reflect correct Unit title UEENEEK145A Implement and monitor energy sector environmental and sustainable policies and procedures	20
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4	Update	Elective	HLTAID001 - Provide cardiopulmonary resuscitation	10
4	Edit	Core	Correct title of UEENEEE101A - Apply Occupational Health and Safety regulations, codes and practices in the workplace	20
4	Edit	Core	Correct title of UEENEEE102A - Fabricate, assemble and dismantle utilities industry components	40
4	Edit	Core	Correct title of UEENEEE119A - Solve problems in multiple path extra low voltage (ELV) a.c. circuits	40
4	Edit	Core	Correct title of UEENEEI138A - Provide solutions to extra low voltage (ELV) electro-pneumatic control systems and drives	60
4	Edit	Core	Correct title of UEPOPS416B - Monitor the implementation of the enterprise's production-maintenance quality control procedures	20
4	Edit	Elective	Correct title of UEENEED101A - Use computer applications relevant to a workplace	20
4	Edit	Elective	Correct title of UEENEED102A - Assemble, set-up and test computing devices	80
4	Edit	Elective	Correct title of UEENEED117A - Install and configure network systems for internetworking	120
4	Edit	Elective	Correct title of UEENEEG111A - Carry out basic repairs to electrical components and equipment	40
4	Edit	Elective	Correct title of UEENEEG164A - Repair and maintain mechanical components of electrical machines	60
4	Edit	Elective	Correct title of UEENEEH111A - Troubleshoot single phase input d.c. power supplies	40
4	Edit	Elective	Correct title of UEENEEH114A - Troubleshoot resonance circuits in an electronic apparatus	80

4	Edit	Elective	Correct title of UEENEEI101A - Use instrumentation drawings, specification, standards and equipment manuals	40
4	Edit	Elective	Correct title of UEENEEI103A - Solve problems in density/level measurement components and systems	40
4	Edit	Elective	Correct title of UEENEEI107A - Install instrumentation and control cabling and tubing	20
4	Edit	Elective	Correct title of UEENEEI108A - Install instrumentation and control apparatus and associated equipment	20
4	Edit	Elective	Correct title of UEENEEI116A - Assemble, enter and verify operating instructions in microprocessor equipped devices	20
4	Edit	Elective	Correct title of UEENEEI121A - Trouble shoot in measuring and analysis systems	40
4	Edit	Elective	Correct title of UEENEEI122A - Assist in commissioning process and instrumentation control systems	40
4	Edit	Elective	Correct title of UEENEEI126A - Provide solutions to pneumatic-hydraulic system operations	80
4	Edit	Elective	Correct title of UEENEEI148A - Solve problems in single phase electronic power control circuits	60
4	Edit	Elective	Correct title of UEENEEI149A - Solve problems in polyphase electronic power control circuits	60
4	Edit	Elective	Correct title of UEENEEP026A - Conduct in-service safety testing of electrical cord connected equipment and cord assemblies	20

Description

Scope

This qualification provides competencies to assemble, set up and program, fault find, repair and maintain automated equipment, apparatus, associated circuits and systems. It's includes the supervision of plant maintenance programs and providing technical advice to process staff.

^ From 1 July 2022 the elective unit HLTAID001 must no longer be delivered and will be replaced in the Packaging Rules by the unit HLTAID009 - for more information see: <https://asqa.gov.au/news-events/news/reminder-about-superseded-hlt-first-aid-units>

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 760 points in accordance with the Elective Competency Standard Units table below.

Core Competency Standard Units		Weighting Points
All Core competency standard units to be achieved		
UEENEED104A	Use engineering applications software on personal computers	40
UEENEEE038B	Participate in development and follow a personal competency development plan	20
UEENEEE101A	Apply Occupational Health and Safety regulations, codes and practices in the workplace	20
UEENEEE102A	Fabricate, assemble and dismantle utilities industry components	40

Core Competency Standard Units		Weighting Points
All Core competency standard units to be achieved		
UEENEEE104A	Solve problems in d.c. circuits	80
UEENEEE107A	Use drawings, diagrams, schedules, standards, codes and specifications	40
UEENEEE117A	Implement and monitor energy sector OHS policies and procedures	20
UEENEEE119A	Solve problems in multiple path extra low voltage (ELV) a.c. circuits	40
UEENEEE124A	Compile and produce an energy sector detailed report	60
UEENEEE137A	Document and apply measures to control OHS risks associated with electrotechnology work	20
UEENEEI138A	Provide solutions to extra low voltage (ELV) electro-pneumatic control systems and drives	60
UEENEEK145A	Implement and monitor energy sector environmental and sustainable policies and procedures	20
UEPOPS202B	Apply Quality Systems To Work	20
UEPOPS337B	Maintain Quality Systems within the Team	20
UEPOPS416B	Monitor the implementation of the enterprise's production-maintenance quality control procedures	20
Total points in core		520

Elective Competency Standard Units

Complete Elective units to achieve a total of weighting of 760 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 4. If units have not being assigned a	0	220

	weighting by the relevant EE-Oz Industry Technical Advisory Committee, their weighting will be 10 points.		
B	Qualification Elective Units	0	540
C	Qualification Elective Units You may select all your elective units from this Group	220	760

Group A – Imported and Common Elective Units. You may complete units to a maximum weighting of 220		Weighting Points
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
UEENEEED101A	Use computer applications relevant to a workplace	20
UEENEEEE009B	Comply with scheduled and preventative maintenance program processes	20
UEENEEEE020B	Provide basic instruction in the use of electrotechnology apparatus	20
BSBINN301A	Promote Innovation in a team Environment	40
BSBCUS401B	Coordinate implementation of customer service strategies	40
BSBINM401A	Implement workplace information system	40
BSBLED401A	Develop teams and individuals	40
BSBMGT402A	Implement operational plan	40
BSBMGT403A	Implement continuous improvement	40
BSBWOR401A	Establish effective workplace relationships	50
BSBWOR402A	Promote team effectiveness	50
BSBWOR404B	Develop Work Priorities	40
TLILIC2001A	Licence to operate a forklift truck	40

HLTAID001	Provide cardiopulmonary resuscitation	10
^ HLTAID009	Provide cardiopulmonary resuscitation (must be delivered from 1 July 2022)	

Group B – Qualification Elective Units. You may complete units to a maximum weighting of 540		Weighting Points
UEENEED102A	Assemble, set-up and test computing devices	80
UEENEED146A	Set up and configure basic local area network (LAN)	40
UEENEEF108A	Select and arrange equipment for wireless communication networks	40
UEENEEG111A	Carry out basic repairs to electrical components and equipment	40
UEENEEG101A	Solve problems in electromagnetic devices and related circuits	60
UEENEEG102A	Solve problems in low voltage a.c. circuits	80
UEENEEG106A	Terminate cables, cords and accessories for low voltage circuits	40
UEENEEG164A	Repair and maintain mechanical components of electrical machines	60
UEENEEH111A	Troubleshoot single phase input d.c. power supplies	40
UEENEEH114A	Troubleshoot resonance circuits in an electronic apparatus	80
UEENEEI101A	Use instrumentation drawings, specification, standards and equipment manuals	40
UEENEEI102A	Solve problems in pressure measurement components and systems	40
UEENEEI103A	Solve problems in density/level measurement components and systems	40
UEENEEI104A	Solve problems in flow measurement components and systems	40
UEENEEI105A	Solve problems in temperature measurement components and systems	40

UEENEEI106A	Set up and adjust PID control loops	40
UEENEEI107A	Install instrumentation and control cabling and tubing	20
UEENEEI108A	Install instrumentation and control apparatus and associated equipment	20
UEENEEI110A	Set up and adjust advanced PID process control loops	40
UEENEEI111A	Find and rectify faults in process final control elements	40
UEENEEI112A	Verify compliance and functionality of instrumentation and control installations	40
UEENEEI113A	Setup and configure human-machine interface (HMI) and industrial networks	60
UEENEEI116A	Assemble, enter and verify operating instructions in microprocessor equipped devices	20
UEENEEI150A	Develop, enter and verify discrete control programs for programmable controllers	60
UEENEEM080A	Report on the integrity of explosion-protected equipment in a hazardous area	20
UEENEOP024A	Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt supply	20
UEENEOP025A	Attach cords, cables and plugs to electrical equipment for connection to 1000 Va.c. or 1500 Vd.c. supply	20
UEENEOP026A	Conduct in-service safety testing of electrical cord connected equipment and cord assemblies	20

Group C – Qualification Elective Units.		Weighting Points
You must complete units to a minimum weighting of 220		
You may select all your elective units from this Group		
UEENEED117A	Install and configure network systems for internetworking	120
UEENEEI119A	Set up industrial field control devices	60
UEENEEI120A	Provide solutions to problems in industrial control systems	60
UEENEEI121A	Trouble shoot in measuring and analysis systems	40

Group C – Qualification Elective Units. You must complete units to a minimum weighting of 220 You may select all your elective units from this Group		Weighting Points
UEENEEI122A	Assist in commissioning process and instrumentation control systems	40
UEENEEI125A	Provide solutions to fluid circuit operations	60
UEENEEI126A	Provide solutions to pneumatic-hydraulic system operations	80
UEENEEI139A	Diagnose and rectify faults in digital controls systems	60
UEENEEI148A	Solve problems in single phase electronic power control circuits	60
UEENEEI149A	Solve problems in polyphase electronic power control circuits	60
UEENEEI151A	Develop, enter and verify word and analogue control programs for programmable logic controllers.	60
UEENEEI152A	Develop, enter and verify programs in Supervisory Control and Data Acquisition systems	60
UEENEEI155A	Develop structured programs to control external devices	40

Note:

1. Prerequisite 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 prerequisite pathway for the progression to achieve particular competencies or qualification at a higher level.
3. Registered training organisations shall also provide information related to the relevant pathway(s) that may be taken to achieve paraprofessional status (“associate membership”) with a professional engineering membership organisation.

END OF QUALIFICATION

Custom Content Section

Not applicable.