



**Australian Government**

# **UEE41611 Certificate IV in Renewable Energy**

**Release: 4**

## UEE41611 Certificate IV in Renewable Energy

### Modification History

Release	Action	Core/Elective	Details	Points
2	Update	Group A	HLTCPR211A Perform CPR	10

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

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 UEENEEE108A - Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits	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 UEENEEK128A - Solve problems in stand-alone renewable energy systems	60
4	Edit	Core	Correct title of UEENEEK149A - Verify compliance and functionality of a extra low voltage renewable energy installation	40

4	Edit	Elective	Correct title of UEENEEC004B - Prepare specifications for the supply of materials and equipment for electrotechnology projects	40
4	Edit	Elective	Correct title of UEENEEED101A - Use computer applications relevant to a workplace	20
4	Edit	Elective	Correct title of UEENEEEE114A - Supervise and coordinate energy sector work activities	40
4	Edit	Elective	Correct title of UEENEEEE192A - Produce detailed electrotechnology /utilities drawings using computer aided design equipment and software	60
4	Edit	Elective	Correct title of UEENEEK110A - Co-ordinate maintenance of renewable energy (RE) apparatus and systems	20
4	Edit	Elective	Correct title of UEENEEK117A - Maintain and repair facilities associated with remote area essential service operations	120
4	Edit	Elective	Correct title of UEENEEK130A - Solve problems in wind energy conversion systems rated up to 10 kW	60
4	Edit	Elective	Correct title of UEENEEK134A - Install ELV stand-alone photovoltaic power systems	60
4	Edit	Elective	Correct title of UEENEEK135A - Design grid connected photovoltaic power supply systems	60
4	Edit	Elective	Correct title of UEENEEK143A - Install small wind energy conversion systems rated up to 10 kW for ELV stand-alone applications	20
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 select, install, commission, fault find and maintain multiple renewable energy sources and equipment for control of energy use.

^ 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 540 points in accordance with the Elective Competency Standard Units table below.

Note: UEENEEK149A- Those holding a 'Certificate III in Renewable Energy – ELV qualification or equivalent' meet the requirements of this unit and its pre-requisite requirements.

Core Competency Standard Units		Weighting Points
All Core competency standard units to be achieved		
UEENEEE117A	Implement and monitor energy sector OHS policies and procedures	20
UEENEEE124A	Compile and produce an energy sector detailed report	60
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
UEENEEE104A	Solve problems in d.c. circuits	80
UEENEEE105A	Fix and secure electrotechnology equipment	20
UEENEEE107A	Use drawings, diagrams, schedules, standards, codes and specifications	40
UEENEEE108A	Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits	40
UEENEEE119A	Solve problems in multiple path extra low voltage (ELV) a.c. circuits	40
UEENEEE137A	Document and apply measures to control OHS risks associated with electrotechnology work	20
UEENEEG101A	Solve problems in electromagnetic devices and related circuits	60
UEENEEK123A	Carry out basic repairs to renewable energy apparatus	80
UEENEEK125A	Solve basic problems in photovoltaic energy apparatus and systems	20
UEENEEK127A	Diagnose and rectify faults in renewable energy control systems	60
UEENEEK128A	Solve problems in stand-alone renewable energy systems	60
UEENEEK149A	Verify compliance and functionality of a extra low voltage renewable energy installation	40
UEENEEK145A	Implement and monitor energy sector environmental and sustainable policies and procedures	20
	<b>Total points in core</b>	<b>740</b>

### Elective Competency Standard Units

Complete Elective units to achieve a total of weighting of 540 points from the following groups:

Group		Minimum points	Maximum points
<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 4. If units have not being assigned a weighting by the relevant EE-Oz Industry Technical Advisory Committee, their weighting will be 10 points.	0	220
<b>B</b>	<b>Qualification Elective Units</b>	0	320
<b>C</b>	<b>Qualification Elective Units</b>	220	380

Group A – Imported and Common Elective Units		Weighting Points
You may complete units to a maximum weighting of 220		
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
CPCCOHS1001A	Work safely in the construction industry	10
HLTAID001 ^ HLTAID009	Provide cardiopulmonary resuscitation <b>Provide cardiopulmonary resuscitation (must be delivered from 1 July 2022)</b>	10
	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	Up to 220 points

	<p>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>	
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<b>Group B – Qualification Elective Units</b>		<b>Weighting Points</b>
You may complete units to a maximum weighting of 320		
UEENEEE190A	Prepare engineering drawings using manual drafting and CAD for electrotechnology/utilities applications	60
UEENEEE191A	Prepare electrotechnology/utilities drawings using manual drafting and CAD equipment and software	60
UEENEEI150A	Develop, enter and verify discrete control programs for programmable controllers	60
UEENEEK107A	Conduct checks in the demand side use of remote area power supplies (RAPS)	40
UEENEEK108A	Plan periodic maintenance schedules of remote area power supplies (RAPS)	40
UEENEEK109A	Attend to breakdowns in remote area power supplies (RAPS)	20
UEENEEK117A	Maintain and repair facilities associated with remote area essential service operations	120
UEENEEK120A	Maintain operation of remote area power generation plant	120
UEENEEK124A	Solve basic problems in micro hydro systems	20
UEENEEK130A	Solve problems in wind energy conversion systems rated up to 10 kW	60
UEENEEK134A	Install ELV stand-alone photovoltaic power systems	60
UEENEEK137A	Install, set up and maintain ELV micro-hydro	20

	systems rated up to 6.4 kW	
UEENEEK143A	Install small wind energy conversion systems rated up to 10 kW for ELV stand-alone applications	20
UEENEEP024A	Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt supply	20
UEENEEP025A	Attach cords, cables and plugs to electrical equipment for connection to 1000 V.a.c. or 1500 V.d.c. supply	20
UEENEEP026A	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 and to a maximum of 380		
UEENEEC004B	Prepare specifications for the supply of materials and equipment for electrotechnology projects	40
UEENEEC005B	Estimate electrotechnology projects	40
UEENEEE114A	Supervise and coordinate energy sector work activities	40
UEENEEE192A	Produce detailed electrotechnology /utilities drawings using computer aided design equipment and software	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
UEENEEK110A	Co-ordinate maintenance of renewable energy (RE) apparatus and systems	20
UEENEEK135A	Design grid connected photovoltaic power supply systems	60

**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.

END OF QUALIFICATION

## **Custom Content Section**

Not applicable.