



**Australian Government**

# **UEE41011 Certificate IV in Energy Management and Control**

**Release: 2**

## UEE41011 Certificate IV in Energy Management 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

### Description

#### Scope

This qualification provides competencies to develop strategies for the reduction of energy in buildings and to recommend changes in the way in which energy is controlled in the building either by the installation of new control equipment or by the modification or re-programming of that existing. It includes ERAC requirements for an 'Electrician's licence'.

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

Note 1: UEENEEG105A - Those holding an 'Unrestricted Electricians Licence or equivalent issued in an Australian State or Territory meets the requirements of this unit and its pre-requisite requirements.

Core Competency Standard Units All Core competency standard units to be achieved		Weighting Points
UEENEEE038B	Participate in development and follow a personal competency development plan	20
UEENEEE101A	Apply Occupational Health Safety regulations, codes and practices in the workplace	20
UEENEEE102A	Fabricate, dismantle, assemble of 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
UEENEEE117A	Implement and monitor energy sector OHS policies and procedures	20
UEENEEE124A	Compile and produce an energy sector detailed report	60
UEENEEE137A	Document and apply measures to control OHS risks associated with electrotechnology work	20
UEENEEG006A	Solve problems in single and three phase low voltage machines	80
UEENEEG033A	Solve problems in single and three phase low voltage electrical apparatus and circuits	60

UEENEEG063A	Arrange circuits, control and protection for general electrical installations	40
UEENEEG101A	Solve problems in electromagnetic devices and related circuits	60
UEENEEG102A	Solve problems in low voltage a.c. circuits	80
UEENEEG103A	Install low voltage wiring and accessories	20
UEENEEG104A	Install appliances, switchgear and associated accessories for low voltage electrical installations	20
UEENEEG105A	Verify compliance and functionality of low voltage general electrical installations	40
UEENEEG106A	Terminate cables, cords and accessories for low voltage circuits	40
UEENEEG107A	Select wiring systems and cables for low voltage general electrical installations	60
UEENEEG108A	Trouble-shoot and repair faults in low voltage electrical apparatus and circuits	40
UEENEEG109A	Develop and connect electrical control circuits	80
UEENEEK145A	Implement and monitor energy sector policies and procedures for environmental and sustainable work practices	20
UEENEEK152A	Develop strategies to address sustainability issues for electrical installations	20
<b>Total points in core</b>		<b>980</b>

### Elective Competency Standard Units

Complete Elective units to achieve a total of weighting of 300 points from the following groups:

Group	Minimum points	Maximum points
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<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	100
<b>B</b>	<b>Qualification Elective Units</b>	0	100
<b>C</b>	<b>Qualification Elective Units</b> You may select all your elective units from this Group	200	300

<b>Group A – Imported and Common Elective Units</b> You may complete units to a maximum weighting of 100		<b>Weighting Points</b>
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 basic 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
HLTCPR211A	Perform CPR	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 have not being assigned a weighting by the relevant EE-Oz Industry Technical Advisory Committee, their weighting will be 10 points.	Up to 100 points

	Note: For further information see Application of the NQC Flexibility Formula, UEE11 Electrotechnology Training Package, Version 1, Volume 1 Qualification Framework	
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<b>Group B – Qualification Elective Units</b> You may complete units to a maximum weighting of 100		<b>Weighting Points</b>
UEENEED104A	Use engineering applications software on personal computers	40
UEENEEE121A	Plan an residential integrated cabling system	40
UEENEEF102A	Install and maintain cabling for multiple access to telecommunication services	120
UEENEEF104A	Install and modify performance data communication copper cabling	40
UEENEEG113A	Install and maintain emergency and safety systems.	60
UEENEEG171A	Install, set up and commission interval metering	20
UEENEEG181A	Provide advice on effective and energy efficient lighting products	20
UEENEEG182A	Supply effective and efficient lighting products for domestic and small commercial applications	40
UEENEEG183A	Provide advice on the application of energy efficient lighting for ambient and aesthetic effect	20
UEENEEG189A	Install and maintain emergency lighting systems	40
UEENEEH102A	Repair basic electronic apparatus faults by replacement of components	40
UEENEEH111A	Troubleshoot single phase input d.c. power supplies	40
UEENEEI141A	Develop electrical integrated systems	40
UEENEEI102A	Solve problems in pressure measurement circuits and systems	40
UEENEEI103A	Solve problems in density/level measurement circuits and systems	40
UEENEEI104A	Solve problems in flow measurement circuits and systems	40
UEENEEI105A	Solve problems in temperature measurement circuits and systems	40

UEENEEI116A	Enter and verify operating instructions in microprocessor equipped devices	20
UEENEEI150A	Develop, enter and verify discrete control programs for programmable controllers	60

Group C – Qualification Elective Units		Weighting Points
You must complete units to a minimum weighting of 200		
You may select all your elective units from this Group		
UEENEEE073B	Write specifications for refrigeration and air conditioning engineering projects	40
UEENEEG076A	Install and replace low voltage current transformer metering	20
UEENEEG121A	Verify compliance and functionality of special LV electrical installations	40
UEENEEG122A	Conduct compliance inspection of single phase LV electrical installations	60
UEENEEG123A	Conduct compliance inspection of LV electrical installations with demand exceeding 100 A per phase	40
UEENEEG124A	Conduct compliance inspection of special LV electrical installations	60
UEENEEG125A	Plan LV electrical installations with a demand up to 400A per phase	40
UEENEEG128A	Plan layouts for electrical switchboards and control panels	40
UEENEEG162A	Set up and place LV electrical apparatus and associated circuits into service	40
UEENEEG168A	Diagnose and rectify faults in complex lifts equipment and systems	40
UEENEEG172A	Investigate and produce reports on electrical incidents	60
UEENEEG175A	Develop compliance policies and plans to conduct a electrical contracting business	80



UEENEEG177A	Select power factor correction equipment	40
UEENEEG179A	Develop detailed electrical drawings	60
UEENEEG184A	Provide photometric data for illumination system design	60
UEENEEG185A	Select effective and efficient light sources and luminaires for given locations and designs	60
UEENEEG186A	Design effective and efficient lighting for residential and commercial buildings	20
UEENEEG188A	Prepare quotations for the supply of effective and efficient lighting products for lighting projects	20
UEENEEK153A	Assessment of energy loads and uses for energy efficiency in residential, office and retail dwellings	40
UEENEEK154A	Assessment of energy loads and uses for energy efficiency in commercial facilities	40
UEENEEK155A	Assessment of energy loads and uses for energy efficiency in large industrial properties and enterprise	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.

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

Not applicable.