



**Australian Government**

# **UEE41920 Certificate IV in Electrical - Renewable Energy**

**Release 3**

# UEE41920 Certificate IV in Electrical - Renewable Energy

## Modification History

Release 3. Updated superseded elective units.

Release 2. Two units added to general electives. Imported elective units updated.

Release 1. This is the first release of this qualification in the UEE Electrotechnology Training Package

## Qualification Description

This qualification provides competencies to select, install, set up, test, fault find, repair and maintain electrical systems and equipment in buildings and premises.

It includes requirements and competencies to select, install, set up, test, fault find, repair and maintain stand-alone renewable energy (RE) equipment and systems.

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

## Entry Requirements

The entry requirement for this qualification is:

- UEE30820 Certificate III in Electrotechnology Electrician

or

- a current 'Unrestricted Electricians Licence' or its equivalent issued in an Australian state or territory.

## Packaging Rules

A total of **440 weighting points** comprising:

**280 core weighting points** listed below; **plus**

**160 general elective weighting points** from the general elective units listed below.

Choose a total of **160 weighting points** elective units from the list below, of which between 0 and 50 **weighting points** can be taken from Group A; between 0 and 120 **weighting points** can be taken from Group B; and between 40 and 160 **weighting points** can be taken from Group C (or all 160 elective **weighting points** can be taken from Group C).

**Up to 50 weighting points of the general elective units Group A**, may be selected, with appropriate contextualisation, from any relevant nationally endorsed Training Package or accredited course, provided that selected units contribute to the vocational outcome of the qualification. Previously assigned weighting points are listed in the UEE Electrotechnology

Training Package Companion Volume Implementation Guide (CVIG), if not listed weighting points will be 10 points, unless directed from the Electrotechnology Industry Reference Committee (IRC).

There are units of competency within this qualification that contain pre-requisites. Units of competency that have a pre-requisite requirement are identified by this symbol \*. Refer directly to the units of competency to identify pre-requisite requirements to ensure all are complied with. A list of all pre-requisites is also provided in the UEE Pre-requisite Companion Volume.

Where imported units are selected, care must be taken to ensure all pre-requisite units specified are complied with.

<b>Core units</b>		<b>Weighting Points</b>
UEECD0010	Compile and produce an energy sector detailed report	60
UEECD0024	Implement and monitor energy sector WHS policies and procedures	20
UEECD0027	Participate in development and follow a personal competency development plan	20
UEERE0015	Implement and monitor energy sector environmental and sustainable policies and procedures	20
UEERE0022	Solve basic problems in photovoltaic energy apparatus and systems*	20
UEERE0025	Carry out basic repairs to renewable energy (RE) apparatus*	80
UEERE0034	Diagnose and rectify faults in renewable energy (RE) control systems*	60
<b>Group A: Imported and common elective units</b>		<b>Weighting Points</b>
BSBOPS203	Deliver a service to customers	20
CPCWHS1001	Prepare to work safely in the construction industry	10
HLTAID009	Provide cardiopulmonary resuscitation	10
ICTICT214	Operate application software packages	20
UEECD0011	Comply with scheduled and preventative maintenance program processes	20
UEECD0035	Provide basic instruction in the use of electrotechnology apparatus	20
UEECO0002	Maintain documentation	20

UEECO0015	Provide quotations for installation or service jobs	20
UEECO0017	Source and purchase material/parts for installation or service jobs	20

**Group B: Qualification elective units.****Weighting Points**

UEECS0033	Use engineering applications software on personal computers	40
UEEEL0078	Install and commission whole current electricity meters*	20
UEEIC0002	Assemble, enter and verify operating instructions in microprocessor equipped devices*	20
UEEIC0013	Develop, enter and verify discrete control programs for programmable controllers*	60
UEERE0016	Install, configure and commission LV grid-connected photovoltaic power systems*	40
UEERE0019	Maintain safety and tidiness of remote area power supply systems*	20
UEERE0023	Work safely with remote area power supply systems*	20
UEERE0035	Install ELV stand-alone photovoltaic power systems*	60
UEERE0036	Install small wind energy conversion systems rated up to 10 kW for ELV stand-alone applications*	20
UEERE0037	Install, configure and commission LV micro-hydro systems rated up to 6.4 kW*	20
UEERE0038	Install, configure and commission LV wind energy conversion systems rated up to 10 kW*	40
UEERE0039	Install, set up and maintain ELV micro-hydro systems rated up to 6.4 kW*	20
UEERE0045	Solve basic problems in micro-hydro systems*	20
UEERE0046	Solve problems in stand-alone renewable energy (RE) systems*	60
UEERE0047	Solve problems in wind energy conversion systems (WECS) rated up to 10 kW*	60
UEERE0049	Apply safe work practices in the rooftop solar industry	20

UEERE0050	Identify and isolate multiple supply systems*	20
UEERE4001	Install, maintain and fault find battery storage systems for grid-connected photovoltaic systems*	60
UEERE5001	Design battery storage systems for grid-connected photovoltaic systems*	80

**Group C: Qualification elective units****Weighting Points**

UEEEL0050	Install and replace low voltage current transformer metering*	20
UEERE0003	Assess energy loads and uses for energy efficiency in commercial facilities*	40
UEERE0004	Assess energy loads and uses for energy efficiency in industrial properties and enterprises*	40
UEERE0005	Assess energy loads and uses for energy efficiency in residential, office and retail premises*	40
UEERE0011	Design grid-connected photovoltaic power supply systems*	60
UEERE0014	Develop strategies to address sustainability issues for electrical installations*	20
UEERE0027	Coordinate maintenance of renewable energy (RE) apparatus and systems*	20

**Qualification Mapping Information**

This qualification replaces and is not equivalent to UEE41911 Certificate IV in Electrical - Renewable Energy

**Links**

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>