



**Australian Government**

**UEE62022 Advanced Diploma of  
Engineering Technology - Renewable  
Energy**

**Release 1**

# UEE62022 Advanced Diploma of Engineering Technology - Renewable Energy

## Modification History

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

This qualification replaces and is not equivalent to UEE62020 Advanced Diploma of Engineering Technology - Renewable Energy. Modifications include:

- Significant changes to core and elective unit structure and packaging rules

## Qualification Description

This qualification provides competencies in preparation to design and validate/evaluate renewable energy (RE) equipment and systems and provide technical advice/sales.

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

## Entry Requirements

There are no entry requirements for this qualification.

## Packaging Rules

A total of **2160 weighting points** comprising:

1230 core weighting points; plus

930 elective weighting points

Choose a minimum of 930 elective weighting points units from the list below, of which:

- a minimum of 350 weighting points must be taken from Group A
- between 0 and 450 weighting points can be taken from Group B

Up to 300 weighting points of the general elective units Group B, 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>
UEECD0003	Apply industry and community standards to engineering activities	20
UEECD0004	Apply material science to solving electrotechnology engineering problems	60
UEECD0005	Apply physics to solving electrotechnology engineering problems	60
UEECD0007	Apply work health and safety regulations, codes and practices in the workplace	20
UEECD0010	Compile and produce an energy sector detailed report	60
UEECD0014	Develop design briefs for electrotechnology projects	40
UEECD0019	Fabricate, assemble and dismantle utilities industry components*	40
UEECD0020	Fix and secure electrotechnology equipment*	20
UEECD0025	Lay wiring/cablings and terminate accessories for extra-low voltage (ELV) circuits*	40
UEECD0036	Provide engineering solutions for problems in complex multiple path circuits	60
UEECD0039	Provide solutions to basic engineering computational problems*	60
UEECD0044	Solve problems in multiple path circuits	40
UEECD0046	Solve problems in single path circuits	40
UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications*	40
UEECD0062	Write specifications for renewable energy engineering projects	40

UEECS0033	Use engineering applications software on personal computers	40
UEEEL0019	Solve problems in direct current (d.c.) machines*	30
UEEEL0020	Solve problems in low voltage a.c. circuits*	80
UEEEL0021	Solve problems in magnetic and electromagnetic devices*	30
UEEEL0062	Provide engineering solutions to problems in complex polyphase power circuits*	60
UEERE0051	Apply electrical principles to renewable energy design	40
UEERE0054	Conduct site survey for grid-connected photovoltaic and battery storage systems	30
UEERE0055	Conduct site survey for off-grid photovoltaic/generating set systems	40
UEERE0067	Develop engineering solutions to renewable energy (RE) problems	60
UEERE0069	Diagnose and rectify faults in renewable energy (RE) control systems*	60
UEERE0082	Maintain renewable energy (RE) apparatus	20
UEERE0084	Manage renewable energy (RE) projects	40
UEERE0085	Plan renewable energy (RE) projects	60
Group A Elective units.		Weighting Points
CPPHES4005	Assess household energy use and efficiency improvements	40
UEEIC0013	Develop, enter and verify discrete control programs for programmable controllers*	60
UEEIC0014	Develop, enter and verify programs in supervisory control and data acquisition systems*	60
UEEIC0015	Develop, enter and verify word and analogue control programs for programmable logic controllers*	60

UEERL0001	Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt supply*	20
UEERL0002	Attach cords, cables and plugs to electrical equipment for connection to 1000 V a.c. or 1500 V d.c.*	20
UEERL0003	Conduct in-service safety testing of electrical cord connected equipment and cord assemblies*	20
UEERE0052	Assess energy loads and uses for energy efficiency in commercial facilities*	40
UEERE0053	Assess energy loads and uses for energy efficiency in industrial properties and enterprises*	40
UEERE0057	Coordinate the design of micro-grid renewable energy systems	50
UEERE0058	Coordinate the installation, fault finding and repair of micro grid systems	40
UEERE0059	Design energy management controls for electrical installations in buildings*	80
UEERE0061	Design grid-connected photovoltaic power supply systems *	40
UEERE0062	Design micro-hydro systems *	40
UEERE0063	Design off-grid photovoltaic/generating set systems*	40
UEERE0064	Design renewable energy heating systems *	40
UEERE0065	Design wind energy systems *	40
UEERE0066	Develop effective engineering strategies for energy reduction in buildings*	60
UEERE0068	Develop strategies to address sustainability issues for electrical installations	20
UEERE0069	Diagnose and rectify faults in renewable energy (RE) control systems*	60
Group B Elective units.		Weighting Points

BSBINS501	Implement information and knowledge management systems	50
BSBLDR522	Manage people performance	70
BSBSTR501	Establish innovative work environments	50
BSBSTR502	Facilitate continuous improvement	60
BSBTWK502	Manage team effectiveness	60
ICTICT214	Operate application software packages	20
UEECD0016	Document and apply measures to control WHS risks associated with electrotechnology work*	20
UEECD0024	Implement and monitor energy sector WHS policies and procedures	20
UEECD0030	Prepare electrotechnology/utilities drawings using manual drafting and CAD equipment and software*	60
UEECD0031	Prepare engineering drawings using manual drafting and CAD for electrotechnology applications*	60
UEECD0032	Produce detailed electrotechnology/utilities drawings using CAD equipment and software*	60
UEECD0035	Provide basic instruction in the use of electrotechnology apparatus	20
UEECD0047	Supervise and coordinate energy sector work activities	40
UEECO0001	Estimate electrotechnology projects	40
UEECO0002	Maintain documentation	20
UEECO0013	Prepare specifications for the supply of materials and equipment for electrotechnology projects	40
UEECO0015	Provide quotations for installation or service jobs	20
UEECO0017	Source and purchase material/parts for installation or service jobs	20

