TUGAS 4

KAJIAN TEKNOLOGI DAN VOKASI

Dosen Pengampu:

Dr. Elih Mulyana, M.Si.

Disusun oleh:

Muhammad Ramdan

(NIM: 1904637)

DEPARTEMEN PENDIDIKAN TEKNIK ELEKTRO

FAKULTAS PENDIDIKAN TEKNIK DAN KEJURUAN

UNIVERSITAS PENDIDIKAN INDONESIA

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UEE42020 Certificate IV in Electrical - Photovoltaic systems

Modification History

Release 2: This minor update is the second release of this qualification in the UEE Electrotechnology Training Package.

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 photovoltaic (PV) systems and associated equipment.

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:

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

180 general elective weighting points from the general elective units listed below.

Choose a total of 180 **weighting points** elective units from the list below, of which between 0 and 90 **weighting points** can be taken from Group A; between 0 and 90 **weighting points** can be taken from Group B; and between 90 and 180 **weighting points** can be taken from Group C (or all electives units of 180 **weighting points** can be taken from Group C).

Up to 90 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.

Core units		**Weighting Points**
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
UEEEL0013	Install, set up and commission interval metering*	20
UEERE0011	Design grid-connected photovoltaic power supply systems*	60
UEERE0015	Implement and monitor energy sector environmental and sustainable policies and procedures	20
UEERE0016	Install, configure and commission LV grid-connected photovoltaic power systems*	40
UEERE0022	Solve basic problems in photovoltaic energy apparatus and systems*	20

Group A: Imported and common elective units		**Weighting Points**
BSBOPS203	Deliver a service to customers	20
CPCCWHS1001	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**
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
UEECS0033	Use engineering applications software on personal computers	40
UEEEL0069	Select and arrange equipment for special LV electrical installations*	60
UEEIC0002	Assemble, enter and verify operating instructions in microprocessor equipped devices*	20
UEEIC0013	Develop, enter and verify discrete control programs for programmable controllers*	60
UEERE0025	Carry out basic repairs to renewable energy (RE) apparatus*	80
UEERE0034	Diagnose and rectify faults in renewable energy (RE) control systems*	60
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	40

	conversion systems rated up to 10 kW*	
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
Group C: Qualification elective units		**Weighting Points**
UEECD0032	Produce detailed electrotechnology/utilities drawings using CAD equipment and software*	60
UEECO0001	Estimate electrotechnology projects	40
UEECO0013	Prepare specifications for the supply of materials and equipment for electrotechnology projects	40
UEEEL0007	Develop detailed electrical drawings*	60
UEEEL0029	Conduct compliance inspection of LV electrical installations with demand exceeding 100 A per phase*	40
UEEEL0030	Conduct compliance inspection of single phase LV electrical installations*	60
UEEEL0031	Conduct compliance inspection of special LV electrical installations*	60
UEEEL0040	Develop compliance policies and plans to conduct an electrical contracting business*	80
UEEEL0050	Install and replace low voltage current transformer metering*	20

UEEEL0051	Investigate and report on electrical incidents and causes*	60
UEEEL0057	Plan electrical installations with a low voltage demand up to 400 A per phase*	40
UEEEL0073	Verify compliance and functionality of special LV electrical installations*	40
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
UEERE0014	Develop strategies to address sustainability issues for electrical installations*	20

Qualification Mapping Information

This qualification replaces and is not equivalent to UEE42011 Certificate IV in Electrical - Photovoltaic systems

Links

Companion Volume Implementation Guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6