UEE41222 Certificate IV in Electrical – Rail Signalling

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 UEE41220 Certificate IV in Electrical – Rail Signalling.

Modifications in this release include:

- Certificate III in Electrical Fitting added to Entry Requirements.
- Entry Requirements amended to allow the qualification to be completed concurrently with entry requirement qualifications.
- Weighting points allocations for Core and Elective Groups adjusted.
- UEERS0034 and UEERS0036 moved from core to elective groups.
- Weighting points for UEERS0021 changed from 30 to 40.
- UEERS0020 added to core.
- Group B units changed.
- Weighting points for UEERS0027 changed from 30 to 40
- RIIWHS204E, TLIF0008, TLF0020, TLIF2010, UEECS0003, UEERE0002, UEERE0035, UEERS0026 and UEERS0035 added to electives
- UEECS0029 moved to Group C.
- UEERS0027 and UEERS0034 included in both Groups B and C to allow flexibility in selection of them.
- UEECD0010, UEECD0058, UEECS0033, UEERS0002, UEERS0003, UEERS0007 and UEERS0015 removed from qualification.

Qualification Description

This qualification provides competencies to install, certify, fault find and maintain rail signalling equipment and systems.

This includes requirements for performing like-for-like replacement, performing authorised installations and alterations, and applying emergency operational restriction. It excludes changing circuit principles, changing the design function and commissioning.

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

Entry Requirements

The entry requirement for this qualification is:

- Certificate III in Electrotechnology Electrician

or

- Certificate III in Electrical Fitting

or

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

Can be completed concurrently with either of the entry requirement qualifications listed above as long as all requirements for completion of the relevant Certificate III qualification are met prior to issuing this qualification. Care should be taken to ensure all prerequisite units are met.

Packaging Rules

A minimum of **510 weighting points** comprising:

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

Minimum of **120 general elective weighting points** from the general elective units listed below.

Choose a minimum of 120 **weighting points** elective units from the list below, of which:

- between 0 and 40 **weighting points** can be taken from Group A;
- a minimum of 40 **weighting points** must be taken from Group B; and,
- a minimum of 40 **weighting points** must be taken from Group C

Up to 30 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 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.

Prerequisite units not packaged in this qualification will be met by entry requirements.

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

Core units	Weighting Points

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
UEERS0020	Apply rail signalling principles	20
UEERS0021	Assemble and wire electrical rail signalling equipment*	40
UEERS0022	Find and repair rail signalling system faults*	20
UEERS0024	Install and maintain rail track circuit leads and bonds*	30
UEERS0025	Maintain active level crossing equipment*	40
UEERS0030	Maintain power-operated point actuating devices*	40
UEERS0031	Maintain rail signalling power supplies*	40
UEERS0032	Maintain trackside signal and train protection equipment*	40
UEERS0033	Maintain train detection equipment*	40
UEERS0037	Test copper rail signalling cables*	20
Group A 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
RIIWHS204E	Work safely at heights	20

TLIF0008	Apply safety critical communication in the environment	10
TLIF0020	Safely access the rail corridor	10
TLIF2010	Apply fatigue management strategies	10
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 Elective units		Weighting Points
UEERS0027	Maintain computer-based interlocking rail systems*	40
UEERS0034	Maintain vital relay interlocking systems*	40

Group C Elective units		**Weighting Points**
UEECS0003	Assemble, set up and test computing devices *	80
UEECS0029	Set up and configure basic local area network (LAN)*	80
UEERE0002	Assemble and connect remote area power supplies *	60
UEERE0035	Install ELV stand-alone photovoltaic power systems *	60
UEERS0023	Inspect, test and certify rail power signal equipment*	20
UEERS0026	Maintain communications based signalling equipment*	20

UEERS0027	Maintain computer-based interlocking rail systems*	40
UEERS0028	Maintain mechanical rail signalling equipment and infrastructure*	20
UEERS0029	Maintain non-vital telemetry systems*	40
UEERS0034	Maintain vital relay interlocking systems*	40
UEERS0035	Maintain wayside asset protection equipment*	20
UEERS0036	Repair rail signalling power and control cables*	40

Qualification Mapping Information

This qualification replaces and is not equivalent to UEE41220 Certificate IV in Electrical – Rail Signalling

Links

UEE - Electrotechnology Training Package Companion Volume Implementation Guide at: [sector webpage link here]