Australian Government

UEE41220 Certificate IV in Electrical – Rail Signalling

Release 1

UEE41220 Certificate IV in Electrical – Rail Signalling

Modification History

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

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:

- 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 **510 weighting points** comprising:

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

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

Choose a total of 70 **weighting points** elective units from the list below, of which between 0 and 30 **weighting points** can be taken from Group A; of which between 0 and 40 **weighting points** can be taken from Group B; and between 30 and 70 **weighting points** can be taken from Group C (or all 70 elective **weighting points** can 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

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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**
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
UEERS0001	Assemble and wire internal electrical rail signalling equipment*	30
UEERS0004	Find and repair rail signalling system faults*	20
UEERS0005	Install and maintain active level crossing equipment*	40
UEERS0009	Install and maintain power-operated point actuating devices*	40
UEERS0010	Install and maintain rail signalling power supplies*	40
UEERS0011	Install and maintain rail track circuit leads and bonds*	30
UEERS0012	Install and maintain trackside signal and train protection equipment*	40
UEERS0013	Install and maintain train detection equipment*	40
UEERS0014	Install and maintain vital relay interlocking systems*	40
UEERS0017	Repair rail signalling power and control cables*	40
UEERS0019	Test copper rail signalling cables*	20

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Group A: Imported and common elective units		**Weighting Points**
BSBCUS201	Deliver a service to customers	20
CPCCWHS1001	Prepare to work safely in the construction industry	10
HLTAID001	Provide cardiopulmonary resuscitation	10
ICTICT203	Operate application software packages	20
TLIS2004	Install and maintain rail bonding systems	40
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: General elective units		**Weighting Points**
UEECS0029	Set up and configure basic local area network (LAN)*	80
UEECS0033	Use engineering applications software on personal computers	40

Group C: General elective units		**Weighting Points**
UEECD0010	Compile and produce an energy sector detailed report	60
UEECD0058	Observe safety practices are followed in the vicinity of isolated electrical cables*	20
UEERS0002	Decommission electrical and electromechanical rail signalling from service*	20
UEERS0003	Develop rail signalling system maintenance programs*	20
UEERS0006	Install and maintain computer-based interlocking rail systems*	30

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UEERS0007	Install and maintain non-vital screen-based control systems*	20
UEERS0008	Install and maintain non-vital telemetry systems*	40
UEERS0015	Maintain electronic and microprocessor-based remote control systems*	20
UEERS0016	Maintain mechanical rail signalling equipment and infrastructure*	20
UEERS0018	Test and commission rail power equipment*	20

Qualification Mapping Information

This qualification replaces and is not equivalent to UEE41211 Certificate IV in Electrical – Rail Signalling

Links

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

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