



Australian Government

UET30719 Certificate III in ESI - Power Systems - Rail Traction

Release 1

UET30719 Certificate III in ESI - Power Systems - Rail Traction

Modification History

Release 1. This is the first release of this qualification in the UET Transmission, Distribution and Rail Sector Training Package

Qualification Description

This qualification provides the skills and knowledge to work in the electrical supply industry (ESI) as a Rail Traction Powerline Worker.

This qualification covers the installation, maintenance and inspection of overhead poles/structures, conductors, cables and rail traction wiring systems, including associated equipment used on these structures in the rail traction industry. It also includes the maintenance of bonds and the operation of rail traction height access equipment.

The skills and knowledge described within the units in this qualification may require a licence or permit to practice in the workplace.

Additional and/or other conditions may also apply under state and territory legislative and regulatory licensing requirements which must be confirmed prior to commencing the qualification.

Entry Requirements

There are no entry requirements for this qualification

Packaging Rules

A total of **1060 weighting points** comprising:

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

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

Choose a minimum of **190 weighting points** elective units from the list below, of which between 0 and 70 **weighting points** can be taken from Group A; and between 120 and 190 **weighting points** from Group B. You may select all your elective from this group.

Up to 70 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, their weighting will be 10 points.

Where imported units are selected, care must be taken to ensure that all prerequisite units specified are complied with.

Core units		Weighting Points
AHCMOM213	Operate and maintain chainsaws	20
CPCCLDG3001A	Licence to perform dogging	20
TLILIC0005	Licence to operate a boom-type elevating work platform (boom length 11 metres or more)	40
UEENEEE101A	Apply Occupational Health and Safety regulations, codes and practices in the workplace	20
UEENEEE102A	Fabricate, assemble and dismantle utilities industry components └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace	40
UEENEEE104A	Solve problems in d.c. circuits └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace	80
UEENEEE105A	Fix and secure electrotechnology equipment └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace	20
UEENEEE107A	Use drawings, diagrams, schedules, standards, codes and specifications └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace	40
UEENEEG101A	Solve problems in electromagnetic devices and related circuits └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace └ UEENEEE104A Solve problems in d.c. circuits	60
UEENEEG102A	Solve problems in low voltage a.c. circuits └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace	80

	<ul style="list-style-type: none"> └ UEENEEE104A Solve problems in d.c. circuits └ UEENEEG101A Solve problems in electromagnetic devices and related circuits 	
UETTDREL11	Apply sustainable energy and environmental procedures	20
UETTDREL12	Operate plant and equipment near live electrical conductors and apparatus	40
	Common Unit Group	
	<ul style="list-style-type: none"> └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace └ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications └ UETTDREL16 Working safely near live electrical apparatus 	
UETTDREL16	Working safely near live electrical apparatus	20
UETTDRI52	Install and maintain poles, structures and associated hardware	50
	Common Unit Group	
	<ul style="list-style-type: none"> └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace └ UEENEEE102A Fabricate, assemble and dismantle utilities industry components └ UEENEEE105A Fix and secure electrotechnology equipment └ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications └ UETTDREL11 Apply sustainable energy and environmental procedures └ UETTDREL16 Working safely near live electrical apparatus 	
UETTDRI54	Install and maintain poles, structures and overhead conductors and cables	60
	Common Unit Group	
	<ul style="list-style-type: none"> └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the 	

	workplace	
	└ UEENEEE102A Fabricate, assemble and dismantle utilities industry components	
	└ UEENEEE105A Fix and secure electrotechnology equipment	
	└ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications	
	└ UETTDREL11 Apply sustainable energy and environmental procedures	
	└ UETTDREL16 Working safely near live electrical apparatus	
UETTDRT21	Install traction overhead wiring systems	50
	Common Unit Group	
	└ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace	
	└ UEENEEE102A Fabricate, assemble and dismantle utilities industry components	
	└ UEENEEE104A Solve problems in d.c. circuits	
	└ UEENEEE105A Fix and secure electrotechnology equipment	
	└ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications	
	└ UEENEEG101A Solve problems in electromagnetic devices and related circuits	
	└ UEENEEG102A Solve problems in low voltage a.c. circuits	
	└ UETTDREL11 Apply sustainable energy and environmental procedures	
	└ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus	
	└ UETTDREL16 Working safely near live electrical apparatus	
	└ UETTDRI52 Install and maintain poles, structures and associated hardware	
	└ UETTDRI54 Install and maintain poles, structures and overhead conductors and cables	
UETTDRT22	Maintain traction overhead wiring systems	60

Common Unit Group

└ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace

└ UEENEEE102A Fabricate, assemble and dismantle utilities industry components

└ UEENEEE104A Solve problems in d.c. circuits

└ UEENEEE105A Fix and secure electrotechnology equipment

└ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications

└ UEENEEG101A Solve problems in electromagnetic devices and related circuits

└ UEENEEG102A Solve problems in low voltage a.c. circuits

└ UETTDREL11 Apply sustainable energy and environmental procedures

└ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

└ UETTDREL16 Working safely near live electrical apparatus

└ UETTDRLS52 Install and maintain poles, structures and associated hardware

└ UETTDRLS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTDRT21 Install traction overhead wiring systems

UETTDRT27 Install overhead traction components and equipment 50

Common Unit Group

└ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace

└ UEENEEE102A Fabricate, assemble and dismantle utilities industry components

└ UEENEEE104A Solve problems in d.c. circuits

└ UEENEEE105A Fix and secure electrotechnology equipment

└ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications

- └ UEENEEG101A Solve problems in electromagnetic devices and related circuits
 - └ UEENEEG102A Solve problems in low voltage a.c. circuits
 - └ UETTDREL11 Apply sustainable energy and environmental procedures
 - └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus
 - └ UETTDREL16 Working safely near live electrical apparatus
 - └ UETTD RIS52 Install and maintain poles, structures and associated hardware
 - └ UETTD RIS54 Install and maintain poles, structures and overhead conductors and cables
- UETTD RRT28 Maintain overhead traction components and equipment 60
- Common Unit Group
- └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace
 - └ UEENEEE102A Fabricate, assemble and dismantle utilities industry components
 - └ UEENEEE104A Solve problems in d.c. circuits
 - └ UEENEEE105A Fix and secure electrotechnology equipment
 - └ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications
 - └ UEENEEG101A Solve problems in electromagnetic devices and related circuits
 - └ UEENEEG102A Solve problems in low voltage a.c. circuits
 - └ UETTDREL11 Apply sustainable energy and environmental procedures
 - └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus
 - └ UETTDREL16 Working safely near live electrical apparatus
 - └ UETTD RIS52 Install and maintain poles, structures and associated hardware
 - └ UETTD RIS54 Install and maintain poles, structures

	and overhead conductors and cables	
	└ UETTDRT27 Install overhead traction components and equipment	
UETTDRT99	Test and verify rail traction installations	40
	Common Unit Group	
	└ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace	
	└ UEENEEE102A Fabricate, assemble and dismantle utilities industry components	
	└ UEENEEE104A Solve problems in d.c. circuits	
	└ UEENEEE105A Fix and secure electrotechnology equipment	
	└ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications	
	└ UEENEEG101A Solve problems in electromagnetic devices and related circuits	
	└ UEENEEG102A Solve problems in low voltage a.c. circuits	
	└ UETTDREL11 Apply sustainable energy and environmental procedures	
	└ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus	
	└ UETTDREL16 Working safely near live electrical apparatus	
	└ UETTDRLS52 Install and maintain poles, structures and associated hardware	
	└ UETTDRLS54 Install and maintain poles, structures and overhead conductors and cables	
	└ UETTDRT21 Install traction overhead wiring systems	
	└ UETTDRT22 Maintain traction overhead wiring systems	
	└ UETTDRT27 Install overhead traction components and equipment	
	└ UETTDRT28 Maintain overhead traction components and equipment	

Group A: Imported and common elective units**Weighting Points**

CPCCLHS3001A	Licence to operate a personnel and materials hoist	10
CPCCLHS3002A	Licence to operate a materials hoist	10
CPCCLRG3001A	Licence to perform rigging basic level	40
	└ CPCCLDG3001A Licence to perform dogging	
CPCCLRG3002A	Licence to perform rigging intermediate level	60
	└ CPCCLRG3001A Licence to perform rigging basic level	
CPCCLSF2001A	Licence to erect, alter and dismantle scaffolding basic level	20
CPCCLSF3001A	Licence to erect, alter and dismantle scaffolding intermediate level	20
	└ CPCCLSF2001A Licence to erect, alter and dismantle scaffolding basic level	
TLILIC0002	Licence to operate a vehicle loading crane (capacity 10 metre tonnes and above)	40
TLILIC0003	Licence to operate a forklift truck	40
TLILIC2015	Licence to drive a medium rigid vehicle	20
TLILIC2016	Licence to drive a heavy rigid vehicle	20
TLILIC0006	Licence to operate a bridge and gantry crane	70
TLILIC0010	Licence to operate a slewing mobile crane (up to 20 tonnes)	70
TLILIC0013	Licence to operate a slewing mobile crane (up to 60 tonnes)	70
TLILIC0015	Licence to operate a slewing mobile crane (over 100 Tonnes)	70
UEENEEE108A	Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits	40
	└ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace	
	└ UEENEEE102A Fabricate, dismantle, assemble of	

	utilities industry components	
	└ UEENEEE105A Fix and secure electrotechnology equipment	
	└ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications	
UEENEEG106A	Terminate cables, cords and accessories for low voltage circuits	40
	└ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace	
	└ UEENEEE102A Fabricate, assemble and dismantle utilities industry components	
	└ UEENEEE105A Fix and secure electrotechnology equipment	
	└ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications	
Group B: General elective units		Weighting Points
UETTD RDP11	Inspect overhead poles-structures and electrical apparatus	50
	Common Unit Group	
	└ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace	
	└ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications	
	└ UETTDREL11 Apply sustainable energy and environmental procedures	
	└ UETTDREL16 Working safely near live electrical apparatus	
UETTD RDP12	Maintain overhead energised low voltage conductors and cables	60
	Common Unit Group	
	└ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace	
	└ UEENEEE102A Fabricate, assemble and dismantle utilities industry components	

	<ul style="list-style-type: none"> └ UEENEEE104A Solve problems in d.c. circuits └ UEENEEE105A Fix and secure electrotechnology equipment └ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications └ UEENEEG101A Solve problems in electromagnetic devices and related circuits └ UEENEEG102A Solve problems in low voltage a.c. circuits └ UETTDREL11 Apply sustainable energy and environmental procedures └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus └ UETTDREL16 Working safely near live electrical apparatus └ UETTDRLS52 Install and maintain poles, structures and associated hardware └ UETTDRLS54 Install and maintain poles, structures and overhead conductors and cables 	
UETTDRLS41	<p>Install network infrastructure electrical equipment</p> <p>Common Unit Group</p> <ul style="list-style-type: none"> └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace └ UEENEEE102A Fabricate, assemble and dismantle utilities industry components └ UEENEEE104A Solve problems in d.c. circuits └ UEENEEE105A Fix and secure electrotechnology equipment └ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications └ UEENEEG101A Solve problems in electromagnetic devices and related circuits └ UEENEEG102A Solve problems in low voltage a.c. circuits └ UETTDREL11 Apply sustainable energy and environmental procedures └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus 	60

└ UETTDREL16 Working safely near live electrical apparatus

Transmission Overhead Pathway Group

└ UETTDNIS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTDNTP26 Install transmission structures and associated hardware

└ UETTDNTP27 Maintain transmission structures and associated hardware

└ UETTDNTP29 Install and maintain transmission overhead conductors and cables

Distribution Overhead Pathway Group

└ UETTDNDP12 Maintain overhead energised low voltage conductors and cables

└ UETTDNIS52 Install and maintain poles, structures and associated hardware

└ UETTDNIS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTDNIS56 Install and maintain low voltage overhead services

Rail Traction Pathway Group

└ UETTDNIS52 Install and maintain poles, structures and associated hardware

└ UETTDNIS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTDNRT21 Install traction overhead wiring systems

└ UETTDNRT22 Maintain traction overhead wiring systems

└ UETTDNRT23 Install rail traction bonds

└ UETTDNRT27 Install overhead traction components and equipment

└ UETTDNRT28 Maintain overhead traction components and equipment

Distribution Cable Jointing Pathway Group

└ UETTDNRCJ21 Lay ESI electrical cables

└ UETTDNRCJ26 Install and maintain de-energised low voltage underground polymeric cables

└ UETTDNRCJ27 Install and maintain de-energised

high voltage underground polymeric cables

└ UETTDNIS55 Install and maintain low voltage underground services

UETTDNIS42 Maintain network infrastructure electrical equipment 60

Common Unit Group

└ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace

└ UEENEEE102A Fabricate, assemble and dismantle utilities industry components

└ UEENEEE104A Solve problems in d.c. circuits

└ UEENEEE105A Fix and secure electrotechnology equipment

└ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications

└ UEENEEG101A Solve problems in electromagnetic devices and related circuits

└ UEENEEG102A Solve problems in low voltage a.c. circuits

└ UETTDREL11 Apply sustainable energy and environmental procedures

└ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

└ UETTDREL16 Working safely near live electrical apparatus

Transmission Overhead Pathway Group

└ UETTDNIS41 Install network infrastructure electrical equipment

└ UETTDNIS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTDRTTP26 Install transmission structures and associated hardware

└ UETTDRTTP27 Maintain transmission structures and associated hardware

└ UETTDRTTP29 Install and maintain transmission overhead conductors and cables

Distribution Overhead Pathway Group

└ UETTDTRDP12 Maintain overhead energised low

voltage conductors and cables

└ UETTDNIS41 Install network infrastructure
electrical equipment

└ UETTDNIS52 Install and maintain poles, structures
and associated hardware

└ UETTDNIS54 Install and maintain poles, structures
and overhead conductors and cables

└ UETTDNIS56 Install and maintain low voltage
overhead services

Rail Traction Pathway Group

└ UETTDNIS41 Install network infrastructure
electrical equipment

└ UETTDNIS52 Install and maintain poles, structures
and associated hardware

└ UETTDNIS54 Install and maintain poles, structures
and overhead conductors and cables

└ UETTDNRRT21 Install traction overhead wiring
systems

└ UETTDNRRT22 Maintain traction overhead wiring
systems

└ UETTDNRRT23 Install rail traction bonds

└ UETTDNRRT27 Install overhead traction
components and equipment

└ UETTDNRRT28 Maintain overhead traction
components and equipment

Distribution Cable Jointing Pathway Group

└ UETTDNRJ21 Lay ESI electrical cables

└ UETTDNRJ26 Install and maintain de-energised
low voltage underground polymeric cables

└ UETTDNRJ27 Install and maintain de-energised
high voltage underground polymeric cables

└ UETTDNIS41 Install network infrastructure
electrical equipment

└ UETTDNIS55 Install and maintain low voltage
underground services

UETTDNIS43	Perform low voltage field switching operation to a given schedule	50
	Electrical	

Common Unit Group

- └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace
- └ UEENEEE102A Fabricate, assemble and dismantle utilities industry components
- └ UEENEEE104A Solve problems in d.c. circuits
- └ UEENEEE105A Fix and secure electrotechnology equipment
- └ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications
- └ UEENEEG101A Solve problems in electromagnetic devices and related circuits
- └ UEENEEG102A Solve problems in low voltage a.c. circuits
- └ UETTDREL16 Working safely near live electrical apparatus

Transmission Overhead Pathway Group

- └ UETTDREL11 Apply sustainable energy and environmental procedures
- └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus
- └ UETTDRLS54 Install and maintain poles, structures and overhead conductors and cables
- └ UETTDRTTP26 Install transmission structures and associated hardware
- └ UETTDRTTP27 Maintain transmission structures and associated hardware
- └ UETTDRTTP29 Install and maintain transmission overhead conductors and cables

Distribution Overhead Pathway Group

- └ UETTDREL11 Apply sustainable energy and environmental procedures
- └ UETTDRLDP12 Maintain overhead energised low voltage conductors and cables
- └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus
- └ UETTDRLS41 Install network infrastructure electrical equipment

└ UETTDNIS42 Maintain network infrastructure electrical equipment

└ UETTDNIS52 Install and maintain poles, structures and associated hardware

└ UETTDNIS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTDNIS56 Install and maintain low voltage overhead services

Rail Traction Pathway Group

└ UETTDREL11 Apply sustainable energy and environmental procedures

└ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

└ UETTDNIS52 Install and maintain poles, structures and associated hardware

└ UETTDNIS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTDNRRT21 Install traction overhead wiring systems

└ UETTDNRRT22 Maintain traction overhead wiring systems

└ UETTDNRRT23 Install rail traction bonds

└ UETTDNRRT27 Install overhead traction components and equipment

└ UETTDNRRT28 Maintain overhead traction components and equipment

Distribution Cable Jointing Pathway Group

└ UETTDREL11 Apply sustainable energy and environmental procedures

└ UETTDRCJ21 Lay ESI electrical cables

└ UETTDRCJ26 Install and maintain de-energised low voltage underground polymeric cables

└ UETTDRCJ27 Install and maintain de-energised high voltage underground polymeric cables

└ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

└ UETTDNIS41 Install network infrastructure electrical equipment

└ UETTDNIS42 Maintain network infrastructure

electrical equipment

└ UETTDRI55 Install and maintain low voltage underground services

Electrical Pathway Group

└ UEENEEE137A Document and apply measures to control OHS risks associated with electrotechnology work

└ UEENEEG006A Solve problems in single and three phase low voltage machines

└ UEENEEG033A Solve problems in single and three phase low voltage electrical apparatus and circuits

└ UEENEEG063A Arrange circuits, control and protection for general electrical installations

└ UEENEEG106A Terminate cables, cords and accessories for low voltage circuits

└ UEENEEG108A Trouble-shoot and repair faults in low voltage electrical apparatus and circuits

└ UEENEEG109A Develop and connect electrical control circuits

└ UEENEEK142A Apply environmentally and sustainable procedures in the energy sector

└ UETTDRI67 Solve problems in energy supply network equipment

UETTDRI44 Perform HV field switching operation to a given schedule 50

Electrical

Common Unit Group

└ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace

└ UEENEEE102A Fabricate, assemble and dismantle utilities industry components

└ UEENEEE104A Solve problems in d.c. circuits

└ UEENEEE105A Fix and secure electrotechnology equipment

└ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications

└ UEENEEG101A Solve problems in electromagnetic devices and related circuits

└ UEEENEEG102A Solve problems in low voltage a.c. circuits

└ UETTDREL16 Working safely near live electrical apparatus

Transmission Overhead Pathway Group

└ UETTDREL11 Apply sustainable energy and environmental procedures

└ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

└ UETTDRLS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTDRLTP26 Install transmission structures and associated hardware

└ UETTDRLTP27 Maintain transmission structures and associated hardware

└ UETTDRLTP29 Install and maintain transmission overhead conductors and cables

Distribution Overhead Pathway Group

└ UETTDREL11 Apply sustainable energy and environmental procedures

└ UETTDRLDP12 Maintain overhead energised low voltage conductors and cables

└ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

└ UETTDRLS41 Install network infrastructure electrical equipment

└ UETTDRLS42 Maintain network infrastructure electrical equipment

└ UETTDRLS52 Install and maintain poles, structures and associated hardware

└ UETTDRLS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTDRLS56 Install and maintain low voltage overhead services

Rail Traction Pathway Group

└ UETTDREL11 Apply sustainable energy and environmental procedures

└ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

└ UETTDNIS52 Install and maintain poles, structures and associated hardware

└ UETTDNIS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTDNRRT21 Install traction overhead wiring systems

└ UETTDNRRT22 Maintain traction overhead wiring systems

└ UETTDNRRT23 Install rail traction bonds

└ UETTDNRRT27 Install overhead traction components and equipment

└ UETTDNRRT28 Maintain overhead traction components and equipment

Distribution Cable Jointing Pathway Group

└ UETTDNRJ21 Lay ESI electrical cables

└ UETTDNRJ26 Install and maintain de-energised low voltage underground polymeric cables

└ UETTDNRJ27 Install and maintain de-energised high voltage underground polymeric cables

└ UETTDREL11 Apply sustainable energy and environmental procedures

└ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

└ UETTDNIS41 Install network infrastructure electrical equipment

└ UETTDNIS42 Maintain network infrastructure electrical equipment

└ UETTDNIS55 Install and maintain low voltage underground services

Electrical Pathway Group

└ UEENEEE137A Document and apply measures to control OHS risks associated with electrotechnology work

└ UEENEEG006A Solve problems in single and three phase low voltage machines

└ UEENEEG033A Solve problems in single and three phase low voltage electrical apparatus and circuits

└ UEENEEG063A Arrange circuits, control and protection for general electrical installations

	<ul style="list-style-type: none"> └ UEENEEG106A Terminate cables, cords and accessories for low voltage circuits └ UEENEEG108A Trouble-shoot and repair faults in low voltage electrical apparatus and circuits └ UEENEEG109A Develop and connect electrical control circuits └ UEENEEK142A Apply environmentally and sustainable procedures in the energy sector └ UETTDNIS67 Solve problems in energy supply network equipment 	
UETTDNIS57	<p>Conduct visual checking and treatment of power system poles and structures</p> <p>Electrotechnology Systems Electrician</p> <p>Common Unit Group</p> <ul style="list-style-type: none"> └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace └ UEENEEE102A Fabricate, assemble and dismantle utilities industry components └ UEENEEE104A Solve problems in d.c. circuits └ UEENEEE105A Fix and secure electrotechnology equipment └ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications └ UEENEEG101A Solve problems in electromagnetic devices and related circuits └ UEENEEG102A Solve problems in low voltage a.c. circuits └ UETTDREL11 Apply sustainable energy and environmental procedures └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus └ UETTDREL16 Working safely near live electrical apparatus <p>Transmission Overhead Pathway Group</p> <ul style="list-style-type: none"> └ UETTDNIS54 Install and maintain poles, structures and overhead conductors and cables └ UETTDRT26 Install transmission structures and associated hardware 	30

└ UETTD RTP27 Maintain transmission structures and associated hardware

└ UETTD RTP29 Install and maintain transmission overhead conductors and cables

└ UETTD RTP30 Inspect transmission overhead structures and electrical apparatus

Distribution Overhead Pathway Group

└ UETTD RDP11 Inspect overhead poles-structures and electrical apparatus

└ UETTD RDP12 Maintain overhead energised low voltage conductors and cables

└ UETTD RIS41 Install network infrastructure electrical equipment

└ UETTD RIS42 Maintain network infrastructure electrical equipment

└ UETTD RIS52 Install and maintain poles, structures and associated hardware

└ UETTD RIS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTD RIS56 Install and maintain low voltage overhead services

Rail Traction Pathway Group

└ UETTD RIS52 Install and maintain poles, structures and associated hardware

└ UETTD RIS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTD RRT21 Install traction overhead wiring systems

└ UETTD RRT22 Maintain traction overhead wiring systems

└ UETTD RRT23 Install rail traction bonds

└ UETTD RRT27 Install overhead traction components and equipment

└ UETTD RRT28 Maintain overhead traction components and equipment

Distribution Cable Jointing Pathway Group

└ UETTD RCJ21 Lay ESI electrical cables

└ UETTD RCJ26 Install and maintain de-energised low voltage underground polymeric cables

	<ul style="list-style-type: none"> └ UETTDRCJ27 Install and maintain de-energised high voltage underground polymeric cables └ UETTDROP11 Inspect overhead poles-structures and electrical apparatus └ UETTDRI41 Install network infrastructure electrical equipment └ UETTDRI42 Maintain network infrastructure electrical equipment └ UETTDRI55 Install and maintain low voltage underground services 	
UETTDRI61	Install mobile generation set for synchronised LV Genset Electrotechnology Electrician Common Unit Group <ul style="list-style-type: none"> └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace └ UEENEEE102A Fabricate, assemble and dismantle utilities industry components └ UEENEEE104A Solve problems in d.c. circuits └ UEENEEE105A Fix and secure electrotechnology equipment └ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications └ UEENEEG101A Solve problems in electromagnetic devices and related circuits └ UEENEEG102A Solve problems in low voltage a.c. circuits └ UETTDREL16 Working safely near live electrical apparatus Transmission Overhead Pathway Group <ul style="list-style-type: none"> └ UETTDREL11 Apply sustainable energy and environmental procedures └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus └ UETTDRI54 Install and maintain poles, structures and overhead conductors and cables └ UETTDRT26 Install transmission structures and associated hardware 	50

└ UETTD RTP27 Maintain transmission structures and associated hardware

└ UETTD RTP29 Install and maintain transmission overhead conductors and cables

Distribution Overhead Pathway Group

└ UETTD RDP12 Maintain overhead energised low voltage conductors and cables

└ UETTD REL11 Apply sustainable energy and environmental procedures

└ UETTD REL12 Operate plant and equipment near live electrical conductors and apparatus

└ UETTD RIS41 Install network infrastructure electrical equipment

└ UETTD RIS42 Maintain network infrastructure electrical equipment

└ UETTD RIS52 Install and maintain poles, structures and associated hardware

└ UETTD RIS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTD RIS56 Install and maintain low voltage overhead services

Rail Traction Pathway Group

└ UETTD REL11 Apply sustainable energy and environmental procedures

└ UETTD REL12 Operate plant and equipment near live electrical conductors and apparatus

└ UETTD RIS52 Install and maintain poles, structures and associated hardware

└ UETTD RIS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTD RRT21 Install traction overhead wiring systems

└ UETTD RRT22 Maintain traction overhead wiring systems

└ UETTD RRT23 Install rail traction bonds

└ UETTD RRT27 Install overhead traction components and equipment

└ UETTD RRT28 Maintain overhead traction components and equipment

Distribution Cable Jointing Pathway Group

- └ UETTDRCJ21 Lay ESI electrical cables
- └ UETTDRCJ26 Install and maintain de-energised low voltage underground polymeric cables
- └ UETTDRCJ27 Install and maintain de-energised high voltage underground polymeric cables
- └ UETTDREL11 Apply sustainable energy and environmental procedures
- └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus
- └ UETTDRI41 Install network infrastructure electrical equipment
- └ UETTDRI42 Maintain network infrastructure electrical equipment
- └ UETTDRI55 Install and maintain low voltage underground services

Electrotechnology Electrician Pathway Group

- └ UEENEEE137A Document and apply measures to control OHS risks associated with electrotechnology work
- └ UEENEEG006A Solve problems in single and three phase low voltage machines
- └ UEENEEG033A Solve problems in single and three phase low voltage electrical apparatus and circuits
- └ UEENEEG063A Arrange circuits, control and protection for general electrical installations
- └ UEENEEG103A Install low voltage wiring and accessories
- └ UEENEEG104A Install appliances, switchgear and associated accessories for low voltage electrical installations
- └ UEENEEG106A Terminate cables, cords and accessories for low voltage circuits
- └ UEENEEG107A Select wiring systems and cables for low voltage general electrical installations
- └ UEENEEG108A Trouble-shoot and repair faults in low voltage electrical apparatus and circuits
- └ UEENEEG109A Develop and connect electrical control circuits

	<ul style="list-style-type: none"> └ UEENEEK142A Apply environmentally and sustainable procedures in the energy sector 	
UETDRRT23	Install rail traction bonds Common Unit Group <ul style="list-style-type: none"> └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace └ UEENEEE102A Fabricate, assemble and dismantle utilities industry components └ UEENEEE104A Solve problems in d.c. circuits └ UEENEEE105A Fix and secure electrotechnology equipment └ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications └ UEENEEG101A Solve problems in electromagnetic devices and related circuits └ UEENEEG102A Solve problems in low voltage a.c. circuits └ UETTDREL11 Apply sustainable energy and environmental procedures └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus └ UETTDREL16 Working safely near live electrical apparatus └ UETTDRI52 Install and maintain poles, structures and associated hardware └ UETTDRI54 Install and maintain poles, structures and overhead conductors and cables 	40
UETDRRT24	Maintain rail traction bonds Common Unit Group <ul style="list-style-type: none"> └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace └ UEENEEE102A Fabricate, assemble and dismantle utilities industry components └ UEENEEE104A Solve problems in d.c. circuits └ UEENEEE105A Fix and secure electrotechnology equipment 	50

	<ul style="list-style-type: none"> └ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications └ UEENEEG101A Solve problems in electromagnetic devices and related circuits └ UEENEEG102A Solve problems in low voltage a.c. circuits └ UETTDREL11 Apply sustainable energy and environmental procedures └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus └ UETTDREL16 Working safely near live electrical apparatus └ UETTDRLS52 Install and maintain poles, structures and associated hardware └ UETTDRLS54 Install and maintain poles, structures and overhead conductors and cables └ UETTDRRRT21 Install traction overhead wiring systems └ UETTDRRRT22 Maintain traction overhead wiring systems └ UETTDRRRT23 Install rail traction bonds └ UETTDRRRT27 Install overhead traction components and equipment └ UETTDRRRT28 Maintain overhead traction components and equipment 	
UETTDRRRT25	Install overhead rail traction configurations	50
	Common Unit Group	
	<ul style="list-style-type: none"> └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace └ UEENEEE102A Fabricate, assemble and dismantle utilities industry components └ UEENEEE104A Solve problems in d.c. circuits └ UEENEEE105A Fix and secure electrotechnology equipment └ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications └ UEENEEG101A Solve problems in electromagnetic devices and related circuits 	

	<ul style="list-style-type: none"> └ UEENEEG102A Solve problems in low voltage a.c. circuits └ UETTDREL11 Apply sustainable energy and environmental procedures └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus └ UETTDREL16 Working safely near live electrical apparatus └ UETTDRLS52 Install and maintain poles, structures and associated hardware └ UETTDRLS54 Install and maintain poles, structures and overhead conductors and cables └ UETTDRLT21 Install traction overhead wiring systems └ UETTDRLT22 Maintain traction overhead wiring systems └ UETTDRLT23 Install rail traction bonds └ UETTDRLT27 Install overhead traction components and equipment └ UETTDRLT28 Maintain overhead traction components and equipment 	
UETTDRLT26	Maintain overhead rail traction configurations Common Unit Group <ul style="list-style-type: none"> └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace └ UEENEEE102A Fabricate, assemble and dismantle utilities industry components └ UEENEEE104A Solve problems in d.c. circuits └ UEENEEE105A Fix and secure electrotechnology equipment └ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications └ UEENEEG101A Solve problems in electromagnetic devices and related circuits └ UEENEEG102A Solve problems in low voltage a.c. circuits └ UETTDREL11 Apply sustainable energy and environmental procedures 	60

	<ul style="list-style-type: none"> └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus └ UETTDREL16 Working safely near live electrical apparatus └ UETTDRLS52 Install and maintain poles, structures and associated hardware └ UETTDRLS54 Install and maintain poles, structures and overhead conductors and cables └ UETTDRLT21 Install traction overhead wiring systems └ UETTDRLT22 Maintain traction overhead wiring systems └ UETTDRLT23 Install rail traction bonds └ UETTDRLT25 Install overhead rail traction configurations └ UETTDRLT27 Install overhead traction components and equipment └ UETTDRLT28 Maintain overhead traction components and equipment 	
UETTDRLT29	<p>Operate rail road traction height access equipment</p> <p>Common Unit Group</p> <ul style="list-style-type: none"> └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace └ UEENEEE102A Fabricate, assemble and dismantle utilities industry components └ UEENEEE104A Solve problems in d.c. circuits └ UEENEEE105A Fix and secure electrotechnology equipment └ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications └ UEENEEG101A Solve problems in electromagnetic devices and related circuits └ UEENEEG102A Solve problems in low voltage a.c. circuits └ UETTDREL11 Apply sustainable energy and environmental procedures └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus 	20

	<ul style="list-style-type: none"> └ UETTDREL16 Working safely near live electrical apparatus └ UETTDRLS52 Install and maintain poles, structures and associated hardware └ UETTDRLS54 Install and maintain poles, structures and overhead conductors and cables └ UETTDRLT21 Install traction overhead wiring systems └ UETTDRLT22 Maintain traction overhead wiring systems └ UETTDRLT27 Install overhead traction components and equipment └ UETTDRLT28 Maintain overhead traction components and equipment 	
UETTDRLT30	Perform to a given schedule rail traction switching operations	50
	Common Unit Group	
	<ul style="list-style-type: none"> └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace └ UEENEEE102A Fabricate, assemble and dismantle utilities industry components └ UEENEEE104A Solve problems in d.c. circuits └ UEENEEE105A Fix and secure electrotechnology equipment └ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications └ UEENEEG101A Solve problems in electromagnetic devices and related circuits └ UEENEEG102A Solve problems in low voltage a.c. circuits └ UETTDREL11 Apply sustainable energy and environmental procedures └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus └ UETTDREL16 Working safely near live electrical apparatus └ UETTDRLS52 Install and maintain poles, structures and associated hardware 	

	<ul style="list-style-type: none"> └ UETTDNIS54 Install and maintain poles, structures and overhead conductors and cables └ UETTDNRRT21 Install traction overhead wiring systems └ UETTDNRRT22 Maintain traction overhead wiring systems └ UETTDNRRT27 Install overhead traction components and equipment └ UETTDNRRT28 Maintain overhead traction components and equipment 	
UETTDNRB39	Perform power system substation switching operation to a given schedule Electrical Common Unit Group <ul style="list-style-type: none"> └ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace └ UEENEEE102A Fabricate, assemble and dismantle utilities industry components └ UEENEEE104A Solve problems in d.c. circuits └ UEENEEE105A Fix and secure electrotechnology equipment └ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications └ UEENEEG101A Solve problems in electromagnetic devices and related circuits └ UEENEEG102A Solve problems in low voltage a.c. circuits └ UETTDREL16 Working safely near live electrical apparatus Transmission Overhead Pathway Group <ul style="list-style-type: none"> └ UETTDREL11 Apply sustainable energy and environmental procedures └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus └ UETTDNIS54 Install and maintain poles, structures and overhead conductors and cables └ UETTDNRTP26 Install transmission structures and associated hardware 	50

└ UETTD RTP27 Maintain transmission structures and associated hardware

└ UETTD RTP29 Install and maintain transmission overhead conductors and cables

Distribution Overhead Pathway Group

└ UETTD RDP12 Maintain overhead energised low voltage conductors and cables

└ UETTD REL11 Apply sustainable energy and environmental procedures

└ UETTD REL12 Operate plant and equipment near live electrical conductors and apparatus

└ UETTD RIS41 Install network infrastructure electrical equipment

└ UETTD RIS42 Maintain network infrastructure electrical equipment

└ UETTD RIS52 Install and maintain poles, structures and associated hardware

└ UETTD RIS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTD RIS56 Install and maintain low voltage overhead services

Rail Traction Pathway Group

└ UETTD REL11 Apply sustainable energy and environmental procedures

└ UETTD REL12 Operate plant and equipment near live electrical conductors and apparatus

└ UETTD RIS52 Install and maintain poles, structures and associated hardware

└ UETTD RIS54 Install and maintain poles, structures and overhead conductors and cables

└ UETTD RRT21 Install traction overhead wiring systems

└ UETTD RRT22 Maintain traction overhead wiring systems

└ UETTD RRT23 Install rail traction bonds

└ UETTD RRT27 Install overhead traction components and equipment

└ UETTD RRT28 Maintain overhead traction components and equipment

Distribution Cable Jointing Pathway Group

- └ UETTDRCJ21 Lay ESI electrical cables
- └ UETTDRCJ26 Install and maintain de-energised low voltage underground polymeric cables
- └ UETTDRCJ27 Install and maintain de-energised high voltage underground polymeric cables
- └ UETTDREL11 Apply sustainable energy and environmental procedures
- └ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus
- └ UETTDRLS41 Install network infrastructure electrical equipment
- └ UETTDRLS42 Maintain network infrastructure electrical equipment
- └ UETTDRLS55 Install and maintain low voltage underground services

Electrical Pathway Group

- └ UEENEEE137A Document and apply measures to control OHS risks associated with electrotechnology work
- └ UEENEEG006A Solve problems in single and three phase low voltage machines
- └ UEENEEG033A Solve problems in single and three phase low voltage electrical apparatus and circuits
- └ UEENEEG063A Arrange circuits, control and protection for general electrical installations
- └ UEENEEG106A Terminate cables, cords and accessories for low voltage circuits
- └ UEENEEG108A Trouble-shoot and repair faults in low voltage electrical apparatus and circuits
- └ UEENEEG109A Develop and connect electrical control circuits
- └ UEENEEK142A Apply environmentally and sustainable procedures in the energy sector
- └ UETTDRLS67 Solve problems in energy supply network equipment

UETTDRT26 Install transmission structures and associated hardware 60

Common Unit Group

- └ UEENEEE101A Apply Occupational Health and

	<p>Safety regulations, codes and practices in the workplace</p> <p>└ UEENEEE102A Fabricate, assemble and dismantle utilities industry components</p> <p>└ UEENEEE105A Fix and secure electrotechnology equipment</p> <p>└ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>└ UETTDREL11 Apply sustainable energy and environmental procedures</p> <p>└ UETTDREL16 Working safely near live electrical apparatus</p>	
UETTD RTP27	<p>Maintain transmission structures and associated hardware</p> <p>Common Unit Group</p> <p>└ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace</p> <p>└ UEENEEE102A Fabricate, assemble and dismantle utilities industry components</p> <p>└ UEENEEE105A Fix and secure electrotechnology equipment</p> <p>└ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>└ UETTDREL11 Apply sustainable energy and environmental procedures</p> <p>└ UETTDREL16 Working safely near live electrical apparatus</p> <p>└ UETTD RTP26 Install transmission structures and associated hardware</p>	60
UETTD RTP29	<p>Install and maintain transmission overhead conductors and cables</p> <p>Common Unit Group</p> <p>└ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace</p> <p>└ UEENEEE102A Fabricate, assemble and dismantle utilities industry components</p> <p>└ UEENEEE105A Fix and secure electrotechnology</p>	60

	equipment	
	└ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications	
	└ UETTDREL11 Apply sustainable energy and environmental procedures	
	└ UETTDREL16 Working safely near live electrical apparatus	
	└ UETTD RTP26 Install transmission structures and associated hardware	
	└ UETTD RTP27 Maintain transmission structures and associated hardware	
UETTD RTP30	Inspect transmission overhead structures and electrical apparatus	40
	Common Unit Group	
	└ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace	
	└ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications	
	└ UETTDREL11 Apply sustainable energy and environmental procedures	
	└ UETTDREL16 Working safely near live electrical apparatus	
UETTD RVC29	Control vegetation whilst performing linework	40
	Common Unit Group	
	└ UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace	
	└ UEENEEE102A Fabricate, assemble and dismantle utilities industry components	
	└ UEENEEE104A Solve problems in d.c. circuits	
	└ UEENEEE105A Fix and secure electrotechnology equipment	
	└ UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications	
	└ UEENEEG101A Solve problems in electromagnetic devices and related circuits	
	└ UEENEEG102A Solve problems in low voltage a.c.	

circuits

└ UETTDREL11 Apply sustainable energy and environmental procedures

└ UETTDREL12 Operate plant and equipment near live electrical conductors and apparatus

└ UETTDREL16 Working safely near live electrical apparatus

└ UETTDRLS52 Install and maintain poles, structures and associated hardware

└ UETTDRLS54 Install and maintain poles, structures and overhead conductors and cables

Qualification Mapping Information

This qualification replaces and is equivalent to UET30712 Certificate III in ESI – Power Systems – Rail Traction

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=229bace1-b7bc-4653-9300-dffb13ecfad7>