



Australian Government

**UET30821 Certificate III in ESI -
Distribution Underground**

UET30821 Certificate III in ESI - Distribution Underground

Modification History

Release	Comments
3	UETDRDU023 Joint, terminate and maintain high voltage Ethylene Propylene Rubber (EPR) cable added to elective Group A
2	Updated superseded Native elective units. Moved UETDRDU001 and UETDRDU017 from Group B to Group A. Release 1. This is the first release of this qualification in the UET Transmission, Distribution and Rail Sector Training Package Release 2.0.
1	This qualification was first released in UET Transmission, Distribution and Rail Sector Release 2.0.

Qualification Description

This qualification provides the skills and knowledge to work in the electricity supply industry (ESI) as a Distribution Underground Cable Jointer.

This qualification covers the installation and maintenance of low voltage (LV) and high voltage (HV) underground cables, services and electrical equipment.

Licensing/Regulatory Information

The application of the skills and knowledge described within the units in this qualification may require a licence/registration to practice in the workplace.

Other conditions may also apply under state and territory legislative and regulatory licensing requirements which must be confirmed prior to commencing this qualification.

Entry Requirements

There are no entry requirements for this qualification

Packaging Rules

A total of **23 units** comprising:

- **18 core units** listed below; plus
- **5 elective units**

The elective units are to be chosen as follows:

- **3 elective units** selected from Group A listed below
- **2 elective units** may be selected from Group A or Group B elective units listed below, of which, 1 elective unit may be selected, with appropriate contextualisation, from a qualification in this or any other endorsed Training Package, provided the selected unit contributes to the vocational outcome of the qualification.

Where imported units are selected, care must be taken to ensure all prerequisite units specified are complied with. Prerequisites attached to any of the units must be obtained and are additional to the number of units required for the qualification.

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.

Core units

CPCCLDG3001	Licence to perform dogging
TLILIC0005	Licence to operate a boom-type elevating work platform (boom length 11 metres or more)
UEECD0007	Apply work health and safety regulations, codes and practices in the workplace
UEECD0019	Fabricate, assemble and dismantle utilities industry components*
UEECD0044	Solve problems in multiple path circuits*
UEECD0046	Solve problems in single path circuits*
UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications*
UEEEL0020	Solve problems in low voltage a.c. circuits*
UEEEL0021	Solve problems in magnetic and electromagnetic devices*
UETDRDU002	Inspect underground electrical apparatus*
UETDRDU009	Install, test and verify distribution underground cable installations*
UETDRDU013	Joint, terminate and maintain high voltage underground polymeric cable*
UETDRDU015	Joint, terminate and maintain low voltage underground polymeric cable*

UETDREL001	Apply environmental requirements
UETDREL004	Operate plant and equipment in the vicinity of live electrical apparatus*
UETDREL005	Work safely in the vicinity of live electrical apparatus*
UETDRIS008	Install and maintain electrical apparatus*
UETDRIS011	Install and maintain low voltage underground services*
Group A	
UETDRDU001	Conduct high voltage testing of underground power cable system*
UETDRDU007	Install and maintain underground public lighting*
UETDRDU010	Joint, terminate and maintain energised low voltage underground paper insulated cable*
UETDRDU011	Joint, terminate and maintain energised low voltage underground polymeric cable*
UETDRDU012	Joint, terminate and maintain high voltage underground paper insulated cable*
UETDRDU014	Joint, terminate and maintain low voltage underground paper insulated cable*
UETDRDU016	Lay power cables
UETDRDU017	Locate faults in underground power cables*
UETDRDU019	Transition joint high voltage paper insulated cable to high voltage polymeric cable*
UETDRDU023	Joint, terminate and maintain high voltage Ethylene Propylene Rubber (EPR) cable*
Group B	
UETDREL003	Identify and apply controls for alternate supplies on the distribution network*
UETDRIS014	Install and replace energy meters and associated equipment*
UETDRIS015	Install low voltage mobile generator*

UETDRIS017	Perform high voltage field switching operation to a given schedule*
UETDRIS018	Perform low voltage field switching operation to a given schedule*
UETDRIS023	Develop and validate high voltage distribution switching programs
UETDRIS024	Develop and validate low voltage distribution switching programs
UETDRSB001	Perform substation switching operations to a given schedule

Pre-requisite Requirements

Unit of competency	Prerequisite requirement
UEEEL0021 Solve problems in magnetic and electromagnetic devices	<p>UEECD0043 Solve problems in direct current circuits</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
UETDRIS008 Install and maintain electrical apparatus	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UETDRIS007 Install and maintain distribution overhead conductors and cables</p> <p>UETDRDU013 Joint, terminate and maintain high voltage underground polymeric cable</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p>

	<p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UETDRDU015 Joint, terminate and maintain low voltage underground polymeric cable</p> <p>UETDREL004 Operate plant and equipment near live electrical conductors and apparatus</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UETDRIS012 Install and maintain poles, structures and hardware</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UEECD0046 Solve problems in single path circuits</p>	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p>
<p>UETDREL003 Identify and apply controls for alternate supplies on the distribution network</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UETDRIS018 Perform low voltage field switching operation to a given schedule</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p>

	<p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UETDRDU023 Joint, terminate and maintain high voltage Ethylene Propylene Rubber (EPR) cable</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UETDRDU013 Joint, terminate and maintain high voltage underground polymeric cable</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p>

	<p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UETDRDU011 Joint, terminate and maintain energised low voltage underground polymeric cable</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UETDRDU015 Joint, terminate and maintain low voltage underground polymeric cable</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UETDRIS018 Perform low voltage field switching operation to a given schedule</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p>

	<p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UETDRIS017 Perform high voltage field switching operation to a given schedule</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UETDRIS018 Perform low voltage field switching operation to a given schedule</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UETDREL004 Operate plant and equipment near live electrical conductors and apparatus</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p>

	<p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UETDRDU015 Joint, terminate and maintain low voltage underground polymeric cable</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UETDRDU014 Joint, terminate and maintain low voltage underground paper insulated cable</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p>

	<p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UETDRDU009 Install, test and verify distribution underground cable installations</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UETDRIS008 Install and maintain electrical apparatus</p> <p>CPCCLDG3001 Licence to perform dogging</p> <p>UETDRDU013 Joint, terminate and maintain high voltage underground polymeric cable</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>TLILIC0005 Licence to operate a boom-type elevating work platform (boom length 11 metres or more)</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UETDRDU015 Joint, terminate and maintain low voltage underground polymeric cable</p> <p>UETDREL004 Operate plant and equipment near live electrical conductors and apparatus</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p>

	<p>UETDRIS011 Install and maintain low voltage underground services</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UETDRDU002 Inspect underground electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UEECD0044 Solve problems in multiple path circuits</p>	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p>
<p>UETDRIS011 Install and maintain low voltage underground services</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>

UEECD0019 Fabricate, assemble and dismantle utilities industry components	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UETDRDU002 Inspect underground electrical apparatus	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UETDREL006 Working safely near live electrical apparatus as a non-electrical worker</p>
UETDREL004 Operate plant and equipment in the vicinity of live electrical apparatus	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UETDRDU001 Conduct high voltage testing of underground power cable system	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
UETDRDU007 Install and maintain underground public lighting	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p>

	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UETDREL004 Operate plant and equipment near live electrical conductors and apparatus</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UETDRIS014 Install and replace energy meters and associated equipment</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEECD0044 Solve problems in multiple path circuits</p>

<p>UETDRDU010 Joint, terminate and maintain energised low voltage underground paper insulated cable</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UETDRDU014 Install and maintain de-energised low voltage underground paper insulated cables</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UETDRDU012 Joint, terminate and maintain high voltage underground paper insulated cable</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p>

	<p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UETDRIS015 Install low voltage mobile generator</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p>	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p>
<p>UETDRDU017 Locate faults in underground power cables</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p>

	<p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UETDRDU019 Transition joint high voltage paper insulated cable to high voltage polymeric cable</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UETDREL001 Apply sustainable energy and environmental procedures</p> <p>UETDRDU013 Joint, terminate and maintain high voltage underground polymeric cable</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UETDREL005 Work safely in the vicinity of live electrical apparatus</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p>	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p>

<p>UEEEL0020 Solve problems in low voltage a.c. circuits</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UEECD0043 Solve problems in direct current circuits</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0046 Solve problems in single path circuits</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
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Qualification Mapping Information

Current Code and Title	Previous Code and Title	Comments	Equivalence
<p>UET30821 Certificate III in ESI - Distribution Underground</p>	<p>UET30819 Certificate III in ESI - Power Systems - Distribution Cable Jointing</p>		<p>Equivalent</p>

Links

Companion volumes, including implementation guides, are found on the national training register - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=229bace1-b7bc-4653-9300-dffb13ecfad7>.