



Australian Government

UEE30725 Certificate III in Switchgear and Controlgear

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Modification History

Release	Comments
1	This qualification was first released in UEE Electrotechnology Training Package Release 8.0.

Qualification Description

This qualification provides competencies for the construction, assembly and wiring of switchboards and control panels.

This qualification has no minimum work placement hours.

Licensing/Regulatory Information

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

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

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

900 core weighting points listed below; plus

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

Choose a total of **160 weighting points** elective units from the list below, of which between **0 and 60 weighting points** can be taken from Group A; and between **100 and 160 weighting points** can be taken from Group B (or all **160 elective weighting points** can be taken from Group B).

Up to **60 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. If weighting points are not listed for an imported unit in any other UEE qualification, default weighting will be 10 points.

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
UEEAS0007 Assemble, mount and connect control gear and switchgear*	40
UEEAS0008 Fabricate and assemble bus bars*	40
UEEAS0009 Mount and wire control panel equipment*	40
UEECD0007 Apply work health and safety regulations, codes and practices in the workplace	20
UEECD0016 Document and apply measures to control WHS risks associated with electrotechnology work*	20
UEECD0019 Fabricate, assemble and dismantle utilities industry components*	40
UEECD0020 Fix and secure electrotechnology equipment*	20
UEECO0028 Engage in instrumentation, control, machine repair or switchgear work and competency development	60
UEECD0043 Solve problems in direct current circuits*	80
UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications*	40
UEEEL0003 Arrange circuits, control and protection for electrical installations*	40
UEEEL0004 Carry out basic repairs to electrical components and equipment*	40
UEEEL0005 Develop and connect electrical control circuits*	80
UEEEL0019 Solve problems in direct current (d.c.) machines*	30
UEEEL0020 Solve problems in low voltage a.c. circuits*	80

UEEEL0021	Solve problems in magnetic and electromagnetic devices*	30
UEEEL0023	Terminate cables, cords and accessories for low voltage circuits*	40
UEEEL0024	Test and connect alternating current (a.c.) rotating machines*	50
UEEEL0025	Test and connect transformers*	30
UEERE0001	Apply environmentally and sustainable procedures in the energy sector	20
UEERL0004	Disconnect - reconnect electrical equipment connected to low voltage (LV) installation wiring*	60
Group A: Imported and common elective units		Weighting Points
BSBOPS203	Deliver a service to customers	20
CPCWHS1001	Prepare to work safely in the construction industry	10
HLTAID009	Provide cardiopulmonary resuscitation	10
HLTAID011	Provide First Aid	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
UEECO0017	Source and purchase material/parts for installation or service jobs	20
UEECO0015	Provide quotations for installation or service jobs	20
Group B: General elective units		Weighting Points

UEECS0033	Use engineering applications software on personal computers	40
UEEDV0001	Assemble and connect telecommunication frames and cabinets*	60
UEEEC0060	Repairs basic electronic apparatus faults by replacement of components*	40
UEEEC0075	Troubleshoot single phase input d.c power supplies*	40
UEEEL0017	Repair and maintain mechanical components of electrical machines*	40
UEEEL0055	Overhaul and repair major switchgear and control gear*	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
UEERL0005	Locate and rectify faults in low voltage (LV) electrical equipment using set procedures*	20

Pre-requisite Requirements

Unit of competency	Prerequisite requirement
UEEEL0024 Test and connect alternating current (a.c.) rotating machines	UEEEL0021 Solve problems in magnetic and electromagnetic devices UEECD0043 Solve problems in direct current circuits UEECD0007 Apply work health and safety regulations, codes and practices in the workplace UEECD0046 Solve problems in single path circuits UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications

	<p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEEEL0023 Terminate cables, cords and accessories for low voltage circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEEEL0019 Solve problems in direct current (d.c.) machines</p> <p>UEECD0020 Fix and secure electrotechnology equipment</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
UEEEL0020 Solve problems in low voltage a.c. circuits	<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>
UEEEC0060 Repairs basic electronic apparatus faults by replacement of components	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p>
UEECD0016 Document and apply measures to control WHS risks associated with electrotechnology work	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

UEEIC0002 Assemble, enter and verify operating instructions in microprocessor equipped devices	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEEC0075 Troubleshoot single phase input d.c power supplies	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UEEEC0065 Solve problems in basic electronic circuits</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>UEEEC0060 Repairs basic electronic apparatus faults by replacement of components</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEEEC0074 Troubleshoot resonance circuits in an electronic apparatus</p> <p>UEECD0045 Solve problems in multiple path extra-low voltage (ELV) a.c. circuits</p> <p>UEEEL0019 Solve problems in direct current (d.c.) machines</p> <p>UEECD0044 Solve problems in multiple path circuits</p>

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>
UEEEL0023 Terminate cables, cords and accessories for low voltage circuits	<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>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEECD0020 Fix and secure electrotechnology equipment</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
UEEEL0017 Repair and maintain mechanical components of electrical machines	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

	<p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0004 Carry out basic repairs to electrical components and equipment</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEECD0020 Fix and secure electrotechnology equipment</p>
UEECD0020 Fix and secure electrotechnology equipment	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p>
UEECD0043 Solve problems in direct current circuits	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p>
UEERL0005 Locate and rectify faults in low voltage (LV) electrical equipment using set procedures	<p>UEERL0004 Disconnect - reconnect electrical equipment connected to low voltage (LV) installation wiring</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p>
UEERL0004 Disconnect - reconnect electrical equipment connected to low voltage (LV) installation wiring	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p>
UEEEL0019 Solve problems in direct current (d.c.) machines	<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>
UEEAS0009 Mount and wire control panel equipment	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UEEEL0003 Arrange circuits, control and protection for electrical installations</p> <p>UEECD0043 Solve problems in direct current circuits</p> <p>UEEEL0005 Develop and connect electrical control 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>UEEEL0025 Test and connect transformers</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEEEL0023 Terminate cables, cords and accessories for low voltage circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEEEL0024 Test and connect alternating current (a.c.) rotating machines</p>

	<p>UEEEL0019 Solve problems in direct current (d.c.) machines</p> <p>UEECD0020 Fix and secure electrotechnology equipment</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
UEEIC0013 Develop, enter and verify discrete control programs for programmable controllers	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p>
UEEEL0025 Test and connect transformers	<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>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEEEL0023 Terminate cables, cords and accessories for low voltage circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEEEL0019 Solve problems in direct current (d.c.) machines</p> <p>UEECD0020 Fix and secure electrotechnology equipment</p>

	UEECD0044 Solve problems in multiple path circuits
UEEEL0055 Overhaul and repair major switchgear and control gear	<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>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEECD0020 Fix and secure electrotechnology equipment</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
UEEEL0004 Carry out basic repairs to electrical components and equipment	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p>
UEEAS0007 Assemble, mount and connect control gear and switchgear	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UEEEL0003 Arrange circuits, control and protection for electrical installations</p> <p>UEECD0043 Solve problems in direct current circuits</p> <p>UEEEL0005 Develop and connect electrical control 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>UEEEL0025 Test and connect transformers</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEEEL0023 Terminate cables, cords and accessories for low voltage circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEEEL0024 Test and connect alternating current (a.c.) rotating machines</p> <p>UEEEL0019 Solve problems in direct current (d.c.) machines</p> <p>UEECD0020 Fix and secure electrotechnology equipment</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UEEEL0005 Develop and connect electrical control circuits</p>	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UEEEL0003 Arrange circuits, control and protection for electrical installations</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>UEEEL0025 Test and connect transformers</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEEEL0023 Terminate cables, cords and accessories for low voltage circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEEEL0024 Test and connect alternating current (a.c.) rotating machines</p> <p>UEEEL0019 Solve problems in direct current (d.c.) machines</p> <p>UEECD0020 Fix and secure electrotechnology equipment</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
UEEEL0003 Arrange circuits, control and protection for electrical installations	<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>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p>

	<p>UEEEL0020 Solve problems in low voltage a.c. circuits</p> <p>UEEEL0023 Terminate cables, cords and accessories for low voltage circuits</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEEEL0019 Solve problems in direct current (d.c.) machines</p> <p>UEECD0020 Fix and secure electrotechnology equipment</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
UEEAS0008 Fabricate and assemble bus bars	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEECD0020 Fix and secure electrotechnology equipment</p>
UEEDV0001 Assemble and connect telecommunication frames and cabinets	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEECD0020 Fix and secure electrotechnology equipment</p>

Qualification Mapping Information

Current Code and Title	Previous Code and Title	Comments	Equivalence
UEE30725 Certificate III in Switchgear and Controlgear	UEE30720 Certificate III in Switchgear and Controlgear	This qualification replaces and is equivalent to UEE30720 Certificate III in Switchgear and Controlgear	Equivalent

Links

Companion volumes, including implementation guides, are found in TGA -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>