



Australian Government

UEE30625 Certificate III in Electrical Machine Repair

UEE30625 Certificate III in Electrical Machine Repair

Modification History

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

Qualification Description

This qualification provides competencies to overhaul and repair motor, transformer and control gear including rewinding.

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:

880 core weighting points listed below; plus

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

Choose a total of **180 weighting points** elective units from the list below, of which between **0 and 60 weighting points** can be taken from Group A; and between **120 and 180 weighting points** can be taken from Group B (or all **180 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
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
UEECD0043	Solve problems in direct current circuits*	80
UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications*	40
UEECO0028	Engage in instrumentation, control, machine repair or switchgear work and competency development	60
UEEEL0004	Carry out basic repairs to electrical components and equipment*	40
UEEEL0017	Repair and maintain mechanical components of electrical machines*	40
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
UEEEL0033	Conduct electrical tests on LV electrical machines*	40
UEEEL0056	Place and connect electrical coils*	40
UEEEL0068	Rewind three phase low voltage induction machines*	60
UEEEL0074	Wind electrical coils*	40
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
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

UEECS0033	Use engineering applications software on personal computers	40
UEEEL0034	Conduct mechanical tests on electrical machines and components*	40
UEEEL0055	Overhaul and repair major switchgear and control gear*	60
UEEEL0066	Rewind LV direct current machines*	60
UEEEL0067	Rewind single phase machines*	40
UEEIC0013	Develop, enter and verify discrete control programs for programmable controllers*	60
UEERA0091	Service small electrical appliances and power tools*	60
UEERL0001	Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt supply*	20
UEERL0002	Attach cords, cables and plugs to electrical equipment for connection to 1000 V a.c. or 1500 V d.c.*	20
UEERL0005	Locate and rectify faults in low voltage (LV) electrical equipment using set procedures*	20

Pre-requisite Requirements

Unit of competency	Prerequisite requirement
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>

UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEIC0013 Develop, enter and verify discrete control programs for programmable controllers	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEERL0002 Attach cords, cables and plugs to electrical equipment for connection to 1000 V a.c. or 1500 V d.c.	UEERL0001 Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt supply
UEECD0019 Fabricate, assemble and dismantle utilities industry components	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEEL0033 Conduct electrical tests on LV electrical machines	<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>UEEEL0068 Rewind three phase low voltage induction machines</p> <p>UEEEL0014 Isolate, test and troubleshoot low voltage electrical circuits</p> <p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEEEL0010 Evaluate and modify low voltage socket outlets circuits</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>UEEEL0074 Wind electrical coils</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>UEEEL0056 Place and connect electrical coils</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEEEL0024 Test and connect alternating current (a.c.) rotating machines</p> <p>UEEEL0009 Evaluate and modify low voltage lighting circuits, equipment and controls</p> <p>UEEEL0019 Solve problems in direct current (d.c.) machines</p> <p>UEEEL0008 Evaluate and modify low voltage heating equipment and controls</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>

<p>UEEEL0074 Wind electrical coils</p>	<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>UEEEL0017 Repair and maintain mechanical components of electrical machines</p>	<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>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>
<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>

<p>UEEEL0025 Test and connect transformers</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>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>
<p>UEECD0020 Fix and secure electrotechnology equipment</p>	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p>
<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>
<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>
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
UEERL0001 Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt supply	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEEL0024 Test and connect alternating current (a.c.) rotating 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>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>
UEECD0043 Solve problems in direct current circuits	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEEL0066 Rewind LV direct current 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>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0074 Wind electrical coils</p> <p>UEEEL0056 Place and connect electrical coils</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEEEL0019 Solve problems in direct current (d.c.) machines</p> <p>UEECD0044 Solve problems in multiple path circuits</p>

UEERA0091 Service small electrical appliances and power tools	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
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>
UEEEL0034 Conduct mechanical tests on electrical machines and components	<p>UEEEL0021 Solve problems in magnetic and electromagnetic devices</p> <p>UEEEL0003 Arrange circuits, control and protection for electrical installations</p> <p>UEEEL0033 Conduct electrical tests on LV electrical machines</p> <p>UEECD0043 Solve problems in direct current circuits</p> <p>UEEEL0068 Rewind three phase low voltage induction machines</p> <p>UEEEL0014 Isolate, test and troubleshoot low voltage electrical circuits</p>

	<p>UEECD0007 Apply work health and safety regulations, codes and practices in the workplace</p> <p>UEEEL0010 Evaluate and modify low voltage socket outlets circuits</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>UEEEL0074 Wind electrical coils</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>UEEEL0056 Place and connect electrical coils</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEEEL0024 Test and connect alternating current (a.c.) rotating machines</p> <p>UEEEL0009 Evaluate and modify low voltage lighting circuits, equipment and controls</p> <p>UEEEL0019 Solve problems in direct current (d.c.) machines</p> <p>UEEEL0008 Evaluate and modify low voltage heating equipment and controls</p> <p>UEECD0020 Fix and secure electrotechnology equipment</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
--	--

<p>UEEEL0068 Rewind three phase low voltage induction machines</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>UEEEL0025 Test and connect transformers</p> <p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0074 Wind electrical coils</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>UEEEL0056 Place and connect electrical coils</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>UEERL0005 Locate and rectify faults in low voltage (LV) electrical equipment using set procedures</p>	<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>
<p>UEEEL0056 Place and connect electrical coils</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>UEEEL0074 Wind electrical coils</p> <p>UEECD0019 Fabricate, assemble and dismantle utilities industry components</p> <p>UEECD0044 Solve problems in multiple path circuits</p>
<p>UEEEL0067 Rewind single phase machines</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>UEEEL0025 Test and connect transformers</p>

	<p>UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications</p> <p>UEEEL0074 Wind electrical coils</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>UEEEL0056 Place and connect electrical coils</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>
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>
--	---

Qualification Mapping Information

Current Code and Title	Previous Code and Title	Comments	Equivalence
UEE30625 Certificate III in Electrical Machine Repair	UEE30620 Certificate III in Electrical Machine Repair	This qualification replaces and is equivalent to UEE30620 Certificate III in Electrical Machine Repair	Equivalent

Links

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