Australian Government

UEE62122 Advanced Diploma of Engineering Technology - Electrical

Release: 3

UEE62122 Advanced Diploma of Engineering Technology - Electrical

Modification History

Release	Comments
3	Updated superseded imported elective units.
2	This is the second release of this qualification in the UEE Electrotechnology Training Package. Modifications include: • Superseded and deleted renewable energy (UEERE…) units updated and/or replaced • ICTNWK426 added to group D electives
1	This qualification was first released in UEE Electrotechnology Training Package Release 4.0.

Qualification Description

This qualification covers competencies to design and validate/evaluate electrical equipment and systems and provide technical advice/sales.

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 **2160 weighting points** comprising:

1200 core weighting points listed below; plus

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

Choose a total of **960 weighting points** elective units from the list below, of which between **0 and 440 weighting points** can be taken from Group A; between **0 and 300 weighting points** can be taken from Group B; between **0 and 300 weighting points** can be taken from Group C; between **0 and 300 weighting points** can be taken from Group D; and between **200 and 960 weighting points** can be taken from Group E (or all **960 elective weighting points** can be taken from Group E.

Up to **360 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**
UEECD0003	Apply industry and community standards to engineering activities	20
UEECD0004	Apply material science to solving electrotechnology engineering problems	60
UEECD0005	Apply physics to solving electrotechnology engineering problems	60
UEECD0007	Apply work health and safety regulations, codes and practices in the workplace	20
UEECD0010	Compile and produce an energy sector detailed report	60
UEECD0014	Develop design briefs for electrotechnology projects	40
UEECD0026	Manage risk in electrotechnology activities	60

UEECD0036	Provide engineering solutions for problems in complex multiple path circuits	60
UEECD0039	Provide solutions to basic engineering computational problems*	60
UEECD0044	Solve problems in multiple path circuits*	40
UEECD0046	Solve problems in single path circuits *	40
UEECD0056	Apply methods to maintain currency of industry developments	20
UEECD0059	Write specifications for electrical engineering projects	40
UEECD0064	Interpret, produce and modify electrotechnology drawings	40
UEEEL0015	Manage large electrical projects*	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
UEEEL0058	Plan large electrical projects*	60
UEEEL0062	Provide engineering solutions to problems in complex polyphase power circuits*	60
UEEEL0077	Evaluate and report on the performance of LV machines *	100
UEEEL0079	Plan and analyse LV electrical apparatus	60
UEEEL0080	Plan and analyse wiring systems, circuits, control and protection for electrical installations	100

UEERE0013	Develop strategies to address environmental and sustainability issues in the energy sector	20
Group A: Imported and common elective units		**Weighting Points**
BSBINS501	Implement information and knowledge management systems	50
BSBLDR522	Manage people performance	70
BSBOPS203	Deliver a service to customers	20
BSBSTR501	Establish innovative work environments	50
BSBSTR502	Facilitate continuous improvement	60
BSBTWK502	Manage team effectiveness	60
ICTICT214	Operate application software packages	20
ICTPRG440	Apply introductory programming skills in different languages	60
ICTPRG443	Apply intermediate programming skills in different languages	80
UEECD0019	Fabricate, assemble and dismantle utilities industry components*	40
UEECD0020	Fix and secure electrotechnology equipment*	20
UEECD0035	Provide basic instruction in the use of electrotechnology apparatus	20
UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications*	40
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**
ICTPRG302	Apply introductory programming techniques	40
MEM30027	Prepare basic programs for programmable logic controllers	40
UEECD0016	Document and apply measures to control WHS risks associated with electrotechnology work*	20
UEECD0017	Establish and follow a competency development plan in an electrotechnology engineering discipline	120
UEECD0025	Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits*	40
UEECD0028	Plan an integrated cabling installation system*	40
UEECD0030	Prepare electrotechnology/utilities drawings using manual drafting and CAD equipment and software*	60
UEECD0031	Prepare engineering drawings using manual drafting and CAD for electrotechnology applications*	60
UEECS0033	Use engineering applications software on personal computers	40
UEEDV0005	Install and maintain cabling for multiple access to telecommunication services*	80
UEEDV0008	Install, modify and verify coaxial and structured communication copper cabling*	40
UEEEC0003	Assemble and set up basic security systems*	80
UEEEC0060	Repairs basic electronic apparatus faults by replacement of components*	40
UEEEC0075	Troubleshoot single phase input d.c power supplies*	40

UEEEL0004	Carry out basic repairs to electrical components and equipment*	40
UEEEL0016	Provide advice on effective and energy efficient lighting products	20
UEEEL0022	Supply effective and efficient lighting products for domestic and small commercial applications*	40
UEEEL0061	Provide advice on the application of energy efficient lighting for ambient and aesthetic effect*	20
UEEIC0002	Assemble, enter and verify operating instructions in microprocessor equipped devices*	20
UEEIC0011	Develop electrical integrated systems*	20
UEEIC0013	Develop, enter and verify discrete control programs for programmable controllers*	60
UEEIC0024	Plan the electrical installation of integrated systems*	20
UEEIC0025	Provide solutions to extra-low voltage (ELV) electro-pneumatic control systems and drives*	60
UEEIC0047	Use instrumentation drawings, specifications, standards and equipment manuals*	40
UEERE0054	Conduct site survey for grid-connected photovoltaic and battery storage systems	30
UEERE0055	Conduct site survey for off-grid photovoltaic/generating set systems	40
Group C: General elective units		**Weighting Points**
UEECD0024	Implement and monitor energy sector WHS policies and procedures	20
UEECO0001	Estimate electrotechnology projects	40
UEEEL0007	Develop detailed electrical drawings*	60

UEEEL0036	Design effective and efficient lighting for residential and commercial buildings*	20
UEEEL0060	Prepare quotations for the supply of effective and efficient lighting products for lighting projects*	20
UEEEL0063	Provide photometric data for illumination system design	60
UEEEL0070	Select effective and efficient light sources and luminaries for given locations and designs*	60
UEEIC0009	Develop an electrical integrated system interface for access through a touch screen*	20
UEEIC0012	Develop structured programs to control external devices*	40
UEEIC0014	Develop, enter and verify programs in supervisory control and data acquisition systems*	60
UEEIC0015	Develop, enter and verify word and analogue control programs for programmable logic controllers*	60
UEERE0061	Design grid-connected photovoltaic power supply systems*	60
UEERE0060	Design grid-connected battery storage systems*	60
Group D: General elective units		**Weighting Points**
ICTNWK426	Install and configure client-server applications and services	60
UEECD0013	Develop and implement energy sector maintenance programs	60
UEECD0032	Produce detailed electrotechnology/utilities drawings using CAD equipment and software *	60
UEECO0014	Prepare tender submissions for electrotechnology projects*	60
UEECS0004	Commission industrial computer systems*	20

UEECS0016	Develop energy sector directory services*	80
UEECS0025	Modify/redesign industrial computer systems*	20
UEEEL0006	Develop detailed and complex drawings for electrical systems using CAD systems*	60
UEEEL0011	Evaluate performance of low voltage electrical apparatus*	40
UEEEL0035	Design effective and efficient lighting for public, open and sports areas*	20
UEEIC0005	Configure and maintain industrial control system networks*	60
UEEIC0010	Develop and test code for microcontroller devices	60
UEEIC0051	Evaluate motor drive systems and diagnose faults *	120
UEERE0062	Design micro-hydro systems*	60
UEERE0064	Design renewable energy heating systems*	120
UEERE0065	Design wind energy systems *	60
Group E: General elective units		**Weighting Points**
ICTPRG430	Apply introductory object-oriented language skills	60
ICTPRG549	Apply intermediate object-oriented language skills	60
MEM234014	Design a robotic system	40
UEECD0001	Analyse materials for suitability in electrical equipment*	80

UEECD0002	Analyse static and dynamic parameters of electrical equipment	80
UEECD0012	Contribute to risk management in electrotechnology systems	20
UEECD0015	Develop engineering solutions to photonic system problems*	80
UEECD0037	Provide engineering solutions for uses of materials and thermodynamic effects	80
UEECD0049	Use advanced computational processes to provide solutions to energy sector engineering problems*	80
UEECO0003	Manage contract variations	40
UEECS0015	Develop energy sector computer network applications infrastructure	80
UEEEC0005	Assess electronic apparatus compliance	60
UEEEC0011	Design and develop electronics/computer systems projects	40
UEEEC0014	Design signal-conditioning sub-systems	80
UEEEC0045	Modify digital signal processing (DSP) based sub-systems	80
UEEEL0041	Develop engineering solution for synchronous machine and control problems*	60
UEEEL0042	Develop engineering solutions for d.c. machine and control problems*	60
UEEEL0043	Develop engineering solutions for induction machine and control problems*	60
UEEIC0006	Design and configure Human-Machine Interface (HMI) networks	60
UEEIC0007	Design and use advanced programming tools, PC networks and HMI Interfacing	120

UEEHA0017	Classify areas where a combustible dust hazard may arise	60
UEEHA0018	Classify areas where flammable gas or vapour hazards may arise	60
UEERE0059	Design energy management controls for electrical installations in buildings*	80
UEERE0066	Develop effective engineering strategies for energy reduction in buildings*	60
UEERE0063	Design off-grid photovoltaic/generating set systems *	40
UEERE0067	Develop engineering solutions to renewable energy (RE) problems*	60

Pre-requisite Requirements

Unit of competency	Prerequisite requirement
UEEDV0008 Install, modify and verify coaxial and structured communication copper cabling	UEECD0043 Solve problems in direct current circuits UEEDV0005 Install and maintain cabling for multiple access to telecommunication services 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 UEECD0019 Fabricate, assemble and dismantle utilities industry components UEECD0020 Fix and secure electrotechnology equipment

	UEECD0044 Solve problems in multiple path circuits
UEECS0025 Modify/redesign industrial computer systems	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEEL0004 Carry out basic repairs to electrical components and equipment	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace UEECD0019 Fabricate, assemble and dismantle utilities industry components
UEEEL0007 Develop detailed electrical drawings	UEECD0031 Prepare engineering drawings using manual drafting and CAD for electrotechnology applications UEECD0032 Produce detailed electrotechnology/utilities drawings using CAD equipment and software UEECD0030 Prepare electrotechnology/utilities drawings using manual drafting and CAD equipment and software
UEEIC0011 Develop electrical integrated systems	ICTICT203 Operate application software packages UEECD0007 Apply work health and safety regulations, codes and practices in the workplace UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications UEEEL0023 Terminate cables, cords and accessories for low voltage circuits UEECD0019 Fabricate, assemble and dismantle utilities industry components

	UEECD0020 Fix and secure electrotechnology equipment UEECD0025 Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits
UEEIC0024 Plan the electrical installation of integrated systems	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications UEEEL0023 Terminate cables, cords and accessories for low voltage circuits UEECD0019 Fabricate, assemble and dismantle utilities industry components UEECD0020 Fix and secure electrotechnology equipment UEECD0025 Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits
UEECO0014 Prepare tender submissions for electrotechnology projects	UEECO0001 Estimate electrotechnology projects
UEECS0016 Develop energy sector directory services	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEIC0051 Evaluate motor drive systems and diagnose faults	UEEEL0077 Evaluate and report on the performance of LV machines UEEEL0019 Solve problems in direct current (d.c.) machines

UEEIC0012 Develop structured programs to control external devices	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
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
UEECD0019 Fabricate, assemble and dismantle utilities industry components	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEEL0061 Provide advice on the application of energy efficient lighting for ambient and aesthetic effect	UEEEL0022 Supply effective and efficient lighting products for domestic and small commercial applications UEEEL0016 Provide advice on effective and energy efficient lighting products
UEEEL0015 Manage large electrical projects	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEECD0046 Solve problems in single path circuits	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEERE0060 Design grid-connected battery storage systems	UEERE0061 Design grid-connected photovoltaic power supply systems UEERE0051 Apply electrical principles to renewable energy design UEEEL0039 Design, install and verify compliance and functionality of general electrical installations UEERE0054 Conduct site survey for grid-connected photovoltaic and battery storage systems

UEERE0059 Design energy management controls for electrical installations in buildings	UEEIC0013 Develop, enter and verify discrete control programs for programmable controllers
UEERE0064 Design renewable energy heating systems	UEERE0055 Conduct site survey for off-grid photovoltaic/generating set systems UEERE0051 Apply electrical principles to renewable energy design UEEEL0039 Design, install and verify compliance and functionality of general electrical installations
UEECD0044 Solve problems in multiple path circuits	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace UEECD0046 Solve problems in single path circuits
UEECD0032 Produce detailed electrotechnology/utilities drawings using CAD equipment and software	UEECD0031 Prepare engineering drawings using manual drafting and CAD for electrotechnology applications 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 UEECD0019 Fabricate, assemble and dismantle utilities industry components UEECD0030 Prepare electrotechnology/utilities drawings using

	manual drafting and CAD equipment and software UEECS0033 Use engineering applications software on personal computers UEECD0044 Solve problems in multiple path circuits
UEECD0039 Provide solutions to basic engineering computational problems	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEERE0062 Design micro-hydro systems	UEERE0055 Conduct site survey for off-grid photovoltaic/generating set systems UEERE0051 Apply electrical principles to renewable energy design UEEEL0039 Design, install and verify compliance and functionality of general electrical installations
UEEEL0060 Prepare quotations for the supply of effective and efficient lighting products for lighting projects	UEEEL0070 Select effective and efficient light sources and luminaries for given locations and designs UEEEL0063 Provide photometric data for illumination system design
UEERE0063 Design off-grid photovoltaic/generating set systems	UEERE0055 Conduct site survey for off-grid photovoltaic/generating set systems UEERE0051 Apply electrical principles to renewable energy design UEEEL0039 Design, install and verify compliance and functionality of general electrical installations

UEECD0049 Use advanced computational processes to provide solutions to energy sector engineering problems	UEECD0039 Provide solutions to basic engineering computational problems UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEEL0062 Provide engineering solutions to problems in complex polyphase power circuits	UEEEL0020 Solve problems in low voltage a.c. circuits UEECD0036 Provide engineering solutions for problems in complex multiple path circuits
UEEEL0020 Solve problems in low voltage a.c. circuits	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 UEECD0044 Solve problems in multiple path circuits
UEEIC0015 Develop, enter and verify word and analogue control programs for programmable logic controllers	UEEIC0013 Develop, enter and verify discrete control programs for programmable controllers UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEIC0005 Configure and maintain industrial control system networks	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

UEEEL0019 Solve problems in direct current (d.c.) 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 UEECD0044 Solve problems in multiple path circuits
UEEEC0060 Repairs basic electronic apparatus faults by replacement of components	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace UEECD0019 Fabricate, assemble and dismantle utilities industry components
UEEIC0013 Develop, enter and verify discrete control programs for programmable controllers	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEEL0035 Design effective and efficient lighting for public, open and sports areas	UEEEL0070 Select effective and efficient light sources and luminaries for given locations and designs UEEEL0063 Provide photometric data for illumination system design
UEEEL0006 Develop detailed and complex drawings for electrical systems using CAD systems	UEECD0031 Prepare engineering drawings using manual drafting and CAD for electrotechnology applications UEECD0043 Solve problems in direct current circuits UEEEL0007 Develop detailed electrical drawings

	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 UEECD0032 Produce detailed electrotechnology/utilities drawings using CAD equipment and software UEECD0019 Fabricate, assemble and dismantle utilities industry components UEECD0030 Prepare electrotechnology/utilities drawings using manual drafting and CAD equipment and software UEECS0033 Use engineering applications software on personal computers UEECD0044 Solve problems in multiple path circuits
UEEEL0070 Select effective and efficient light sources and luminaries for given locations and designs	UEEEL0063 Provide photometric data for illumination system design
UEEEL0036 Design effective and efficient lighting for residential and commercial buildings	UEEEL0070 Select effective and efficient light sources and luminaries for given locations and designs UEEEL0063 Provide photometric data for illumination system design
UEEIC0047 Use instrumentation drawings, specifications, standards and equipment manuals	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

	UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications
UEERE0061 Design grid-connected photovoltaic power supply systems	UEERE0051 Apply electrical principles to renewable energy design UEEEL0039 Design, install and verify compliance and functionality of general electrical installations UEERE0054 Conduct site survey for grid-connected photovoltaic and battery storage systems
UEEEL0043 Develop engineering solutions for induction machine and control problems	UEEEL0021 Solve problems in magnetic and electromagnetic devices UEECD0041 Solve electrotechnical engineering problems UEEEC0065 Solve problems in basic electronic circuits UEECD0043 Solve problems in direct current circuits UEECD0039 Provide solutions to basic engineering computational problems UEECD0007 Apply work health and safety regulations, codes and practices in the workplace UEECD0046 Solve problems in single path circuits UEEEL0062 Provide engineering solutions to problems in complex polyphase power circuits UEEEC0074 Troubleshoot resonance circuits in an electronic apparatus UEEEL0019 Solve problems in direct current (d.c.) machines

	UEECD0036 Provide engineering solutions for problems in complex multiple path circuits UEECD0044 Solve problems in multiple path circuits
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 UEECD0044 Solve problems in multiple path circuits
UEERE0065 Design wind energy systems	UEERE0055 Conduct site survey for off-grid photovoltaic/generating set systems UEERE0051 Apply electrical principles to renewable energy design UEEEL0039 Design, install and verify compliance and functionality of general electrical installations
UEECD0030 Prepare electrotechnology/utilities drawings using manual drafting and CAD equipment and software	UEECD0031 Prepare engineering drawings using manual drafting and CAD for electrotechnology applications 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 UEECD0019 Fabricate, assemble and dismantle utilities industry components UEECS0033 Use engineering applications software on personal computers UEECD0044 Solve problems in multiple path circuits
UEEEL0022 Supply effective and efficient lighting products for domestic and small commercial applications	UEEEL0016 Provide advice on effective and energy efficient lighting products
UEEEL0077 Evaluate and report on the performance of LV machines	UEEEL0021 Solve problems in magnetic and electromagnetic devices UEEEL0020 Solve problems in low voltage a.c. circuits
UEERE0067 Develop engineering solutions to renewable energy (RE) problems	UEERE0055 Conduct site survey for off-grid photovoltaic/generating set systems UEECD0062 Write specifications for renewable energy engineering projects UEERE0051 Apply electrical principles to renewable energy design UEERE0063 Design off-grid photovoltaic/generating set systems UEEEL0039 Design, install and verify compliance and functionality of general electrical installations
UEECD0001 Analyse materials for suitability in electrical equipment	UEECD0002 Analyse static and dynamic parameters of electrical equipment

UEEEL0058 Plan large electrical projects	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEEL0042 Develop engineering solutions for d.c. machine and control problems	UEEEL0021 Solve problems in magnetic and electromagnetic devices UEECD0041 Solve electrotechnical engineering problems UEEEC0065 Solve problems in basic electronic circuits UEECD0043 Solve problems in direct current circuits UEECD0039 Provide solutions to basic engineering computational problems UEECD0007 Apply work health and safety regulations, codes and practices in the workplace UEECD0046 Solve problems in single path circuits UEEEC0074 Troubleshoot resonance circuits in an electronic apparatus UEEEL0019 Solve problems in direct current (d.c.) machines UEECD0036 Provide engineering solutions for problems in complex multiple path circuits UEECD0044 Solve problems in multiple path circuits
UEECD0028 Plan an integrated cabling installation system	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications

	UEEEL0023 Terminate cables, cords and accessories for low voltage circuits UEECD0019 Fabricate, assemble and dismantle utilities industry components UEECD0020 Fix and secure electrotechnology equipment UEECD0025 Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits
UEECD0025 Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications UEECD0020 Fix and secure electrotechnology equipment
UEECD0015 Develop engineering solutions to photonic system problems	UEEEC0065 Solve problems in basic electronic circuits 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 UEECD0044 Solve problems in multiple path circuits
UEEEL0041 Develop engineering solution for synchronous machine and control problems	UEEEL0021 Solve problems in magnetic and electromagnetic devices UEECD0041 Solve electrotechnical engineering problems

	UEEEC0065 Solve problems in basic electronic circuits UEECD0043 Solve problems in direct current circuits UEECD0039 Provide solutions to basic engineering computational problems UEECD0007 Apply work health and safety regulations, codes and practices in the workplace UEECD0046 Solve problems in single path circuits UEEEL0062 Provide engineering solutions to problems in complex polyphase power circuits UEEEC0074 Troubleshoot resonance circuits in an electronic apparatus UEEEL0019 Solve problems in direct current (d.c.) machines UEECD0036 Provide engineering solutions for problems in complex multiple path circuits UEECD0044 Solve problems in multiple path circuits
UEEEC0003 Assemble and set up basic security systems	UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications UEECD0019 Fabricate, assemble and dismantle utilities industry components UEECD0020 Fix and secure electrotechnology equipment
UEECD0031 Prepare engineering drawings using manual drafting and CAD for electrotechnology applications	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

	UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications UEECD0019 Fabricate, assemble and dismantle utilities industry components UEECS0033 Use engineering applications software on personal computers
UEECS0004 Commission industrial computer systems	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEIC0025 Provide solutions to extra-low voltage (ELV) electro-pneumatic control systems and drives	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEIC0014 Develop, enter and verify programs in supervisory control and data acquisition systems	UEEIC0013 Develop, enter and verify discrete control programs for programmable controllers UEEIC0015 Develop, enter and verify word and analogue control programs for programmable logic controllers UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEIC0009 Develop an electrical integrated system interface for access through a touch screen	ICTICT203 Operate application software packages UEECD0007 Apply work health and safety regulations, codes and practices in the workplace UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications UEEIC0011 Develop electrical integrated systems

	UEEEL0023 Terminate cables, cords and accessories for low voltage circuits UEECD0019 Fabricate, assemble and dismantle utilities industry components UEECD0020 Fix and secure electrotechnology equipment UEECD0025 Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits
UEEEL0011 Evaluate performance of low voltage electrical apparatus	UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
UEEEC0075 Troubleshoot single phase input d.c power supplies	UEEEL0021 Solve problems in magnetic and electromagnetic devices UEEEC0065 Solve problems in basic electronic circuits 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 UEEEC0060 Repairs basic electronic apparatus faults by replacement of components UEEEL0020 Solve problems in low voltage a.c. circuits UEECD0019 Fabricate, assemble and dismantle utilities industry components UEEEC0074 Troubleshoot resonance circuits in an electronic apparatus

	UEECD0045 Solve problems in multiple path extra-low voltage (ELV) a.c. circuits UEEEL0019 Solve problems in direct current (d.c.) machines UEECD0044 Solve problems in multiple path circuits
UEEDV0005 Install and maintain cabling for multiple access to telecommunication services	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 UEECD0019 Fabricate, assemble and dismantle utilities industry components UEECD0020 Fix and secure electrotechnology equipment UEECD0044 Solve problems in multiple path circuits
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

Qualification Mapping Information

Current Code and Title	Previous Code and Title	Comments	Equivalence
UEE62122 Advanced Diploma of Engineering Technology - Electrical	UEE62120 Advanced Diploma of Engineering Technology - Electrical		Not-Equivalent

Links

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