



Australian Government

UEE43220 Certificate IV in Industrial Automation and Control

Release: 3

UEE43220 Certificate IV in Industrial Automation and Control

Modification History

Release 3. This is the third release of this qualification in the UEE Electrotechnology Training Package. Modifications include:

- Updated superseded imported elective units
- ICTTEN420 added to electives (see UEE Release 5.0 Companion Volume Implementation Guide for mapping of deleted UEE units to imported ICT units)

Release 2. Updated superseded imported elective units.

Release 1. This is the first release of this qualification in the UEE Electrotechnology Training Package

Qualification Description

This qualification covers competencies to select, install, set up, test, fault find, repair, maintain and commission systems and devices for measurement and recording of physical/chemical phenomenon and related process control systems.

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 **1280 weighting points** comprising:

520 core weighting points listed below; plus

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

Choose a total of **760 weighting points** elective units from the list below, of which between **0 and 220 weighting points** can be taken from Group A; and between **0 and 540 weighting points** must be taken from Group B; and between **220 and 760 weighting points** must be taken from Group C, or all **760 weighting points** can be taken from Group C.

Up to **220 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. Previously assigned weighting points are listed in the UEE Electrotechnology Training Package Companion Volume Implementation Guide (CVIG), if not listed weighting points will be 10 points, unless directed from the Electrotechnology Industry Reference

Committee (IRC).

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
UEECD0010	Compile and produce an energy sector detailed report	60
UEECD0016	Document and apply measures to control WHS risks associated with electrotechnology work*	20
UEECD0019	Fabricate, assemble and dismantle utilities industry components*	40
UEECD0024	Implement and monitor energy sector WHS policies and procedures	20
UEECD0027	Participate in development and follow a personal competency development plan	20
UEECS0033	Use engineering applications software on personal computers	40
UEECD0043	Solve problems in direct current circuits*	80
UEECD0045	Solve problems in multiple path extra-low voltage (ELV) a.c. circuits*	40
UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications*	40
UEEIC0025	Provide solutions to extra-low voltage (ELV) electro-pneumatic control systems and drives*	60
UEERE0015	Implement and monitor energy sector environmental and sustainable policies and procedures	20
UEPOPS202	Apply quality systems to work	20

UEPOPS337	Maintain quality systems within the team*	20
UEPOPS416	Monitor implementation of quality control for production and maintenance*	20

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

BSBHRM413	Support the learning and development of teams and individuals	40
BSBINS402	Coordinate workplace information systems	40
BSBLDR413	Lead effective workplace relationships	50
BSBLDR414	Lead team effectiveness	50
BSBOPS203	Deliver a service to customers	20
BSBOPS402	Coordinate business operational plans	40
BSBOPS404	Implement customer service strategies	40
BSBPEF402	Develop personal work priorities	40
BSBSTR401	Promote innovation in team environments	40
BSBSTR402	Implement continuous improvement	40
HLTAID009	Provide cardiopulmonary resuscitation	10
ICTICT214	Operate application software packages	20
TLILIC0003	Licence to operate a forklift truck	40
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**

UEECS0003	Assemble, set up and test computing devices*	80
UEECS0029	Set up and configure basic local area network (LAN)*	80
UEEDV0010	Select and arrange equipment for wireless communication networks*	40
UEEEEC0074	Troubleshoot resonance circuits in an electronic apparatus*	80
UEEEEC0075	Troubleshoot single phase input d.c power supplies*	40
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
UEEIC0002	Assemble, enter and verify operating instructions in microprocessor equipped devices*	20
UEEIC0013	Develop, enter and verify discrete control programs for programmable controllers*	60
UEEIC0021	Find and rectify faults in process final control elements*	40
UEEIC0022	Install instrumentation and control apparatus and associated equipment*	20
UEEIC0023	Install instrumentation and control cabling and tubing*	20
UEEIC0029	Set up and adjust PID control loops*	40
UEEIC0030	Set up and adjust advanced PID process control loops*	40

UEEIC0031	Set up and configure human-machine interface (HMI) and industrial networks*	60
UEEIC0038	Solve problems in density/level measurement components and systems*	40
UEEIC0039	Solve problems in flow measurement components and systems*	40
UEEIC0041	Solve problems in pressure measurement components and systems*	40
UEEIC0043	Solve problems in temperature measurement components and systems*	40
UEEIC0047	Use instrumentation drawings, specifications, standards and equipment manuals*	40
UEEIC0048	Verify compliance and functionality of instrumentation and control installations*	40
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
UEERL0003	Conduct in-service safety testing of electrical cord connected equipment and cord assemblies*	20
Group C: General elective units		Weighting Points
ICTTEN420	Design, install and configure an internetwork	100
UEECS0023	Install and configure network systems for internetworking*	120
UEEIC0003	Assist in commissioning process and instrumentation control systems*	40
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	60

	controllers*	
UEEIC0018	Diagnose and rectify faults in digital controls systems*	60
UEEIC0026	Provide solutions to fluid circuit operations*	60
UEEIC0027	Provide solutions to pneumatic-hydraulic system operations*	80
UEEIC0028	Provide solutions to problems in industrial control systems*	60
UEEIC0034	Set up industrial field control devices*	60
UEEIC0040	Solve problems in polyphase electronic power control circuits*	60
UEEIC0042	Solve problems in single phase electronic power control circuits*	60
UEEIC0044	Troubleshoot measuring and analysis systems*	40

Qualification Mapping Information

This qualification replaces and is equivalent to UEE43211 Certificate IV in Industrial Automation and Control

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>