UEP40512 Certificate IV in ESI Generation Maintenance - Electrical Electronics

Entura's electrical maintenance course provides participants with electrical trade background to safely and efficiently operate power generating equipment and associated switchgear, including circuit reading and fault finding.

The course includes site visits to working assets for the training and assessment of maintenance and installation competency, transferring the practical and operational knowledge of experienced staff to the trainee in a structured and certified program. Mentor support from your organisation also provides for further customisation of the training program.

The practical field-based activities will include both training and assessment activities. Trainees will need to be mentored by appropriate senior staff who will need to sign off on an activity that has been completed using a WCA (workplace competency assessment) workbook.

Where required, a WCA document will be developed to assist in providing guidance for training and assessment for on-job activities. The WCA may be used to track training events as the opportunities occur in the workplace.

If the WCA is not suitable, a workplace evidence of task competence completion in the form of a portfolio will need to be gathered to support the skills development of the trainee and the ultimate successful completion of the qualification.

The assessment events will occur on a regular basis to track activity and to provide support. This component of the training should not take longer than eighteen months and is determined by the availability of mentors, and training and assessment events.

Completion requirements

The requirements for granting this qualification will be met when competency is demonstrated and achieved for:

- all the core competency standard units, defined in the *Core competency standard units* table on the following page
- a combination of elective competency standard units to achieve a total weighting of 460 points in accordance with the *Elective competency standard units* table, including any associated prerequisite* units. The prerequisite units can be included in the weighting points.

Those gaining this qualification will be able to complete work functions such as the manufacture, fit, assemble, erect, operate, test, fault find, alter, repair electrical equipment, electronic, instrumentation systems, and includes electrical wiring work only if that work is associated with assembling, maintaining, terminating or altering the wiring between electrical components within a power generating plant or machinery, maintenance planning and scheduling, supervision of others and coordination of work activities of individuals and/or teams.

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Nationally Recognised Training

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Core competency standard units

All core competency standard units to be achieved

UEENEEE101A	Apply occupational health and safety regulations, codes and practices in the workplace
UEENEEE117A	Implement and monitor energy sector OHS policies and procedures
UEPOPS338B	Facilitate effective workplace communications
UEPOPS371A	Carry out operational checks on in-service electrical plant
UEPOPS417B	Monitor and implement environmental plans and procedures
UEPOPS430B	Control permit to work operations
UEENEEE102A*	Fabricate, dismantle, assemble utilities components
UEENEEE104A*	Solve problems in d.c. circuits
UEENEEE105A*	Fix and secure electrotechnology equipment
UEENEEE107A*	Use drawings, diagrams, schedules, standards, codes and specifications
UEENEEE137A*	Document and apply measures to control OHS risks associated with electrotechnology work
UEENEEG006A*	Solve problems in single and three phase low voltage machines
UEENEEG033A*	Solve problems in single and three phase low voltage electrical apparatus and circuits
UEENEEG063A*	Arrange circuits, control and protection for general electrical installations
UEENEEG101A*	Solve problems in electromagnetic devices and related circuits
UEENEEG102A*	Solve problems in low voltage a.c. circuits
UEENEEG106A*	Terminate cables, cords and accessories for low voltage circuits
UEENEEG108A*	Trouble-shoot and repair faults in low voltage electrical apparatus and circuits
UEENEEG109A*	Develop and connect electrical control circuits

Elective competency standard units

Total weighting of 460 points

UEPMNT346B	Maintain electrical equipment	40
UEPMNT350B	Modify electrical equipment	40
UEPMNT351B	Test and commission electrical equipment	40
UEPMNT411B	Diagnose and repair faults in complex electrical equipment	60
UEPMNT412B	Modify complex electrical equipment	60
UEPMNT414B	Test and commission complex electrical equipment	60
UEPMNT416B	Overhaul electrical generators	80
UEPMNT417B	Inspect electrical generators and diagnose faults	80
UEPMNT422B	Conduct performance testing on process plant and equipment	60
UEPMNT433B	Conduct routine generation electrical maintenance	60
TAEDEL301A*	Provide work skill instruction	40

* Not provided. Credit transfer is possible with proof of attainment.

Prerequisites may apply to the above units.