



**Australian Government**

# **UEP50412 Diploma of ESI Generation Maintenance - Electrical Electronic**

**Release: 3**

## UEP50412 Diploma of ESI Generation Maintenance - Electrical Electronic

### Modification History

Release	Action	Core/Elective	Details	Points
2	Update	Group A	BSBWHS501A Ensure a safe workplace	60

3	Edit	Core	Correct weighting points of UEPOPS439B – Plan and organise work	30
3	Edit	Group C	Correct weighting points of UEPOPS440B – Coordinate team activities	30

### Description

**Scope:** This qualification provides competencies to 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. Development of maintenance schedules and project management. Implementation of safe working practices and environmental procedures. Management and supervision of others and coordination of work activities of individuals and/or teams.

Electrical equipment means any appliance, article, accessory, wire, fitting, cable, conduit or apparatus that generates, uses, conveys or controls (or that is intended to generate, use, convey or control) electricity above extra low voltage.

This qualification does not authorise the holder to install any electrical wiring systems within an electrical installation as prescribed by definitions contained in AS/NZS 3000.

### Pathways Information

Not applicable.

## **Licensing/Regulatory Information**

Not applicable.

## **Entry Requirements**

Not applicable.

## **Employability Skills Summary**

Not applicable.

## Packaging Rules

### 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 below and
- A combination of Elective competency standard units to achieve a total weighting of 590 points in accordance with the Elective Competency Standard Units table below.

Core Competency Standard Units		Weighting Points
All core competency standard units to be achieved		
UEENEEE101A	Apply Occupational Health and Safety regulations, codes and practices in the workplace	20
UEENEEE102A	Fabricate, dismantle, assemble utilities components	40
UEENEEE104A	Solve problems in d.c. circuits	80
UEENEEE105A	Fix and secure electrotechnology equipment	20
UEENEEE107A	Use drawings, diagrams, schedules, standards, codes and specifications	40
UEENEEE117A	Implement and monitor energy sector OHS policies and procedures	20
UEENEEE137A	Document and apply measures to control OHS risks associated with electrotechnology work	20
UEENEEG006A	Solve problems in single and three phase low voltage machines	80
UEENEEG033A	Solve problems in single and three phase low voltage electrical apparatus and circuits	60
UEENEEG063A	Arrange circuits, control and protection for general electrical installations	40
UEENEEG101A	Solve problems in electromagnetic devices and related circuits	60
UEENEEG102A	Solve problems in low voltage a.c circuits	80
UEENEEG106A	Terminate cables, cords and accessories for low	40

	voltage circuits	
UEENEEG108A	Trouble-shoot and repair faults in low voltage electrical apparatus and circuits	40
UEENEEG109A	Develop and connect electrical control circuits	80
UEPOPS337B	Maintain Quality Systems within the Team	20
UEPOPS338B	Facilitate Effective Workplace Communications	20
UEPOPS371A	Carry out operational checks on in-service electrical plant	40
UEPOPS417B	Monitor and Implement Environmental Plans and Procedures	20
UEPOPS430B	Control permit to work operations	20
UEPOPS439B	Plan and Organise Work	30
UEPOPS501B	Manage Occupational Health and Safety Policy and Procedures	40
UEPOPS507B	Conduct Project Management	60
UEPOPS509B	Manage Quality Control Procedures	40
<b>Total points in core</b>		<b>1010</b>

### Elective Competency Standard Units

Complete Elective units to achieve a total of weighting of 590 points from the following groups:

Group		Minimum points	Maximum points
A	<b>Imported and Common Elective Units</b> Imported units from other training packages and/or state accredited courses can be added to this group, but they must be selected from qualifications where the unit is first packaged at AQF level 5. If units have not being assigned a weighting by the relevant EE-Oz Industry Technical Advisory Committee, their weighting will be 10 points.	0	270

<b>B</b>	<b>Qualification Electives</b> You may select units from this group for qualification completion.	0	180
<b>C</b>	<b>Qualification Electives</b> You may select units from this group for qualification completion.	0	240
<b>D</b>	<b>Qualification Electives</b> You may select all your elective units from this Group	180	540

<b>Group A - Imported and Common Elective Units.</b> Complete units to a maximum weighting of 270 points		<b>Weighting Points</b>
BSBWOR501B	Manage personal work priorities and professional development	60
BSBMGT502B	Manage people performance	70
BSBMGT515A	Manage operational plan	60
BSBINM501A	Manage an information or knowledge management system	50
BSBCUS501C	Manage quality customer service	40
BSBMGT516C	Facilitate continuous improvement	60
BSBINN502A	Build and sustain an innovative work environment	50
BSBLED501A	Develop a workplace learning environment	60
BSBWOR502B	Ensure team effectiveness	60
BSBWHS501A	Ensure a Safe Workplace	60
	Imported units from other training packages and/or state accredited courses can be added to this group, but they must be selected from qualifications where the unit is first packaged at AQF level 5. If units have not being assigned a weighting by the relevant EE-Oz Industry Technical Advisory Committee, their weighting	Up to 270 points

	<p>will be 10 points.</p> <p>Note: For further information see Application of the NQC Flexibility Formula, Page 10, UEP12 ESI Generation Sector Training Package, Part1.1.00</p>	
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<b>Group B Qualification Electives.</b> Complete units to a maximum weighting of 180 points		<b>Weighting Points</b>
UEPMNT319B	Maintain and Test Fixed Fire Protection Systems	20
UEPMNT345B	Install electronic equipment	40
UEPMNT346B	Maintain electrical equipment	40
UEPMNT347B	Maintain complex electrical equipment	60
UEPMNT348B	Maintain electrical electronic equipment	40
UEPMNT350B	Modify electrical equipment	40
UEPMNT351B	Test and commission electrical equipment	40
UEPMNT352B	Test and commission electronic electrical equipment	40
UEPMNT355B	Install complex/electronic instrumentation equipment	40
UEPMNT356B	Maintain instrumentation equipment	40
UEPMNT357B	Diagnose and repair faults in instrumentation equipment	60
UEPMNT358B	Modify instrumentation equipment	40
UEPMNT359B	Test and Commission Instrumentation Systems	40
UEPMNT361A	Maintain Wind Turbine Mechanical Systems	60
UEPMNT362A	Maintain Wind Turbine Control Systems	60
UEPMNT366A	Maintain power plant inverter systems	60
UEPOPS301B	Conduct Single Energy Source Isolation Procedures for Permit to Work	40

<b>Group C Qualification Electives.</b> Complete units to a maximum weighting of 240 points		<b>Weighting Points</b>
UEENEEC005B	Estimate electrotechnology projects	40



UEENEEE124A	Compile and produce an energy sector report	60
UEPMNT410B	Diagnose and Repair Faults in Electronic Equipment	60
UEPMNT411B	Diagnose and Repair Faults in Complex Electrical Equipment	60
UEPMNT412B	Modify Complex Electrical Equipment	60
UEPMNT413B	Modify Electronic Electrical Equipment	60
UEPMNT414B	Test and Commission Complex Electrical Equipment	60
UEPMNT415B	Diagnose and Repair Faults in Complex Refrigeration / Air Conditioning Equipment	60
UEPMNT416B	Overhaul Electrical Generators	80
UEPMNT417B	Inspect Electrical Generators and Diagnose Faults	80
UEPMNT421B	Conduct Technical Inspection of Process Plant and Equipment	60
UEPMNT422B	Conduct Performance Testing on Process Plant and Equipment	60
UEPMNT424B	Monitor Efficiency of Thermal Steam Cycle Power Plant	60
UEPMNT425B	Maintain Complex Instrumentation Equipment	80
UEPMNT426B	Maintain Electronic Instrumentation Equipment	80
UEPMNT427B	Diagnose and Repair Faults in Complex Instrumentation Equipment	80
UEPMNT428B	Modify Complex Instrumentation Equipment	80
UEPMNT429B	Modify Electronic Instrumentation Equipment	80
UEPMNT430B	Test and Commission Complex Instrumentation Equipment	80
UEPMNT431B	Test and Commission Electronic Instrumentation Equipment	80
UEPOPS402B	Conduct Multiple Energy Source Isolation Procedures for procedures for a Permit to Work	40

UEPOPS440B	Coordinate Team Activities	30
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<b>Group D Qualification Electives.</b> You must complete units to a minimum weighting of 180. You may select units to a maximum weighting of 540.		<b>Weighting Points</b>
UEPMNT501B	Diagnose and Repair Faults in Electrical and Electronic Systems	100
UEPMNT502B	Test and Commission Electronic Electrical Systems	100
UEPMNT503B	Diagnose and Repair Faults in Instrumentation Systems	100
UEPMNT504B	Test and Commission Instrumentation Systems	100
UEPOPS508B	Manage Commissioning/Decommissioning	80
UEPOPS511B	Tune Process Plant and Equipment	60

**Note:**

1. Prerequisite pathways shall be identified and met for all elective units selected.
2. In selecting elective units considerations to career planning advice should be given to units that form part of a prerequisite pathway for the progression to achieve particular competencies or qualification at a higher level.

END OF QUALIFICATION

## Custom Content Section

Not applicable.