Australian Government

UET50312 Diploma of ESI - Power Systems Operations

Release 2

INDUSTRY SKILLS COUNCILS
Creating Australia's Future

UET50312 Diploma of ESI - Power Systems Operations

Modification History

Release	Action	Core/Elective	Details	Points
2	Add	Group A	TLIF2010A Apply fatigue management strategies	30
2	Add	Group A	TLIF3063A Administer the implementation of fatigue management strategies	50

Description

Scope

Those gaining this qualification will be able to acquire skills and knowledge needed for a career in system operation.

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 750 points in accordance with the Elective Competency Standard Units table below.
- All the required prerequisite competency standard units have been met.

Core Competency Standard Units All Core competency standard units to be achieved		**Weighting Points**
UEENEED104A	Use software for engineering applications	40
UEENEEE124A	Compile and produce an energy sector detailed report	60
UEENEEE101A	Apply Occupational Health Safety regulations, codes and practices in the workplace	20
UETTDREL15A	Respond to power systems technical enquiries and requests	40
UEENEEE104A	Solve problems in d.c. circuits	80
UEENEEE107A	Use drawings, diagrams, schedules, standards, cords and specifications	40
UEENEEE125A	Provide engineering solutions for problems in complex multiple path circuits problems	60
UEENEEE126A	Provide solutions to basic engineering computational problems	60
UEENEEG101A	Solve problems in electromagnetic devices and related circuits	60
UEENEEG102A	Solve problems in low voltage a.c. circuits	80
UEENEEG149A	Provide engineering solutions to problems in complex polyphase power circuits	60
UETTDREL11	Apply sustainable energy and environmental	20

Core Competency Standard Units All Core competency standard units to be achieved		**Weighting Points**
A	procedures	
UETTDREL16A	Working safely near live electrical apparatus	20
UETTDRIS62A	Implement and monitor the power systems organisational OHS policies, procedures and programs	30
UETTDRIS63A	Implement and monitor power systems environmental and sustainable energy management policies and procedures	30
UETTDRSO45A	Operate and monitor system SCADA equipment	150
Total points in core		**850**

Elective Competency Standard Units At least a weighting of 750 points to be achieved. Must achieve at least 190 points from Group D			
Group	**Rules**	**Minimum points**	**Maximum points**
A	**Imported and Common Elective Units** 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	**Qualification Electives** You may select units from this group to a maximum weighting of 360 points.	**0**	**360**
C	**Qualification Electives** You may select units from this group to a maximum weighting of 200 points.	**0**	**200**
D	**Qualification Electives**	**190**	**750**

Elective Competency Standard Units At least a weighting of 750 points to be achieved. Must achieve at least 190 points from Group D			
Group	**Rules**	**Minimum points**	**Maximum points**
A	**Imported and Common Elective Units** 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	**Qualification Electives** You may select units from this group to a maximum weighting of 360 points.	**0**	**360**
	At least 190 points to be achieved from this group. You may select all your elective units from this Group		

Group A – Imported and Common Elective Units You may select units from this group to a maximum weighting of 270 points.		**Weighting Points**
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
BSBFIM501A	Manage budgets and financial plans	70
BSBSUS501A	Develop workplace policy and procedures for sustainability	50
TLIF2010A	Apply Fatigue Management Strategies	30
TLIF3063A	Administer the implementation of fatigue management strategies	50
	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. Note: For further information see Application of the NQC Flexibility Formula, Page 10, UET12 Electricity Supply Industry – Transmission, Distribution and Rail Sector Training Package, Version 1, Volume 1 Qualification Framework.	Up to 270 Points

Group B – Qualification Elective Units You may select units from this group to a maximum weighting of 360 points.		**Weighting Points**
UEENEEG006A	Solve problems in single and three phase low voltage machines	80
UEENEEE102A	Fabricate, assemble and dismantle utilities industry components	40
UEENEEH102A	Repair basic electronic apparatus faults by replacement of components	40
UEENEEH112A	Troubleshoot digital sub-systems	80
UEENEEH139A	Troubleshoot basic amplifier circuits	40
UETTDRIS67A	Solve problems in energy supply network equipment	80
UETTDRIS68A	Solve problems in energy supply network protection equipment and systems	40

Group C – Qualification Elective Units You may select units from this group to a maximum weighting of 200 points.		**Weighting Points**
UEENEEI155A	Develop structured programs to control external devices	40
UETTDRDS31A	Draft and layout an power system overhead distribution extension	60
UETTDRDS32A	Draft and layout an power system underground distribution extension	60
UETTDRDS33A	Draft and layout a power system street lighting system	60
UETTDRDS34A	Draft and layout a power system distribution substation minor upgrade	60

Group D – Qualification Elective Units At least 140 points to be achieved from this group.	**Weighting Points**

You may select all your elective units from this Group.		
UETTDRDS35A	Design overhead distribution power systems	140
UETTDRDS36A	Design underground distribution power systems	140
UETTDRDS37A	Design power system distribution substations	140
UETTDRDS38A	Design power system public lighting systems	140
UETTDRDS39A	Prepare and manage detailed construction plans for electrical power system infrastructure	140
UETTDRDS42A	Investigate quality of power systems supply issues	140
UETTDRDS43A	Develop high voltage and low voltage distribution protection systems	150
UETTDRDS44A	Design power system zone substations modifications	150
UETTDRDS45A	Organise and implement ESI line and easement surveys	140
UETTDRDS46A	Develop planned power systems outage strategies	140
UETTDRDS49A	Establish and manage power system geographical information systems data	140
UETTDRIS66A	Manage an electricity power system OHS management system	140
UETTDRIS69A	Diagnose and rectify faults in energy supply apparatus	60
UETTDRIS70A	Diagnose and rectify faults in electrical energy distribution systems	60
UETTDRIS71A	Diagnose and rectify faults in electrical energy supply transmission systems	60
UETTDRIS72A	Diagnose and rectify faults in distributed Generation systems	60
UETTDRSO36A	Develop low voltage distribution switching programs	150
UETTDRSO37A	Develop high voltage distribution and	150

	subtransmission switching programs	
UETTDRSO38A	Develop and evaluate power systems transmission switching programs	150
UETTDRSO39A	Coordinate low voltage distribution networks	150
UETTDRSO40A	Coordinate high voltage distribution and subtransmission networks	150
UETTDRSO43A	Coordinate low voltage distribution network demand	150
UETTDRSO46A	Monitor and control the field staff activities	150
UETTDRSO47A	Coordinate high voltage transmission network	150
UETTDRSO48A	Respond to discrete and interdependent protection operations	150
UETTDRSO49A	Coordinate power system operations in a regulated energy market	150
UETTDRTS21A	Maintain interdependent network protection and control systems	150
UETTDRTS22A	Commission interdependent network protection and control systems	150
UETTDRTS25A	Maintain and test and metering schemes	140
UETTDRTS26A	Commission power systems metering schemes	150
UETTDRTS27A	Perform accuracy checks on power systems instrument transformers	150
UETTDRTS28A	Repair, test and calibrate protection relays and meters	150
UETTDRTS29A	Develop power systems secondary isolation instructional documents	150
UETTDRTS31A	Maintain, test and commission power systems voltage regulating equipment	150
UETTDRTS34A	Install and maintain power system communication equipment	150
UETTDRTS35A	Maintain complex network protection and control	180

	systems	

Note:
1. Prerequisite pathways shall be identified and met for all elective units selected.
END OF QUALIFICATION

Custom Content Section

Not applicable.