



Australian Government

UEP40522 Certificate IV in ESI Generation Maintenance (Mechanical)

Release 2

UEP40522 Certificate IV in ESI Generation Maintenance (Mechanical)

Modification History

Release 2. This is the second release of this qualification in the UEP Electricity Supply Industry - Generation Sector Training Package. With the following changes:

- Minor change to Packaging Rules
- Superseded units updated

Release 1. This is the first release of this qualification in the UEP Electricity Supply Industry - Generation Sector Training Package.

Qualification Description

This qualification covers the skills and knowledge required to complete power generation work functions in the electrical supply industry (ESI). Functions include the installation, repair and maintenance of plant and mechanical systems; and maintenance planning and scheduling. It also includes observation of safe working practices, supervision of others and the coordination of work activities.

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 **1280 weighting points** comprising:

770 core weighting points; plus

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

Choose a total of 510 weighting points from the general elective units list below of which:

- between 0 and 220 weighting points can be taken from Group A
- a maximum of 310 weighting points may be taken from Group B
- between 200 and 510 weighting points may be taken from Group C, you may select all your elective units from this group.

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 that selected units contribute to the vocational outcome of the qualification. Previously assigned weighting points are listed in UEP Electricity Supply

Industry - Generation Sector Training Package Companion Volume Implementation Guide (CVIG), if not listed weighting points will be 10 points unless directed from the ESI Generation Industry Reference Committee (IRC). The general elective units must contribute to the vocational outcomes of the qualification.

Where imported units are selected, care must be taken to ensure that all prerequisite units specified are complied with.

Where a prerequisite unit is attached to a unit, it is identified by this symbol ⊥.

Core units	Weighting points
MEM07005 Perform general machining	80
⊥ MEM09002 Interpret technical drawing	
⊥ MEM11011 Undertake Manual Handling	
⊥ MEM12023 Perform engineering measurements	
⊥ MEM12024 Perform Computations	
⊥ MEM13015 Work safely and effectively in manufacturing and engineering	
⊥ MEM14006 Plan work activities	
⊥ MEM16006 Organise and communicate information	
⊥ MEM18001 Use hand tools	
MEM07006 Perform lathe operations	40
⊥ MEM07005 Perform general machining	
⊥ MEM09002 Interpret technical drawing	
⊥ MEM11011 Undertake Manual Handling	
⊥ MEM12023 Perform engineering measurements	
⊥ MEM12024 Perform Computations	
⊥ MEM13015 Work safely and effectively in manufacturing and engineering	
⊥ MEM14006 Plan work activities	
⊥ MEM16006 Organise and communicate information	
⊥ MEM18001 Use hand tools	
MEM07007 Perform milling operations	40
⊥ MEM07005 Perform general machining	
⊥ MEM09002 Interpret technical drawing	
⊥ MEM11011 Undertake Manual Handling	

	<ul style="list-style-type: none"> └ MEM12023 Perform engineering measurements └ MEM12024 Perform Computations └ MEM13015 Work safely and effectively in manufacturing and engineering └ MEM14006 Plan work activities └ MEM16006 Organise and communicate information └ MEM18001 Use hand tools 	
MEM07008	<p>Perform grinding operations</p> <ul style="list-style-type: none"> └ MEM07005 Perform general machining └ MEM09002 Interpret technical drawing └ MEM11011 Undertake Manual Handling └ MEM12023 Perform engineering measurements └ MEM12024 Perform Computations └ MEM13015 Work safely and effectively in manufacturing and engineering └ MEM14006 Plan work activities └ MEM16006 Organise and communicate information └ MEM18001 Use hand tools 	40
MEM09002	<p>Interpret technical drawing</p> <ul style="list-style-type: none"> └ MEM12023 Perform engineering measurements └ MEM12024 Perform Computations └ MEM13015 Work safely and effectively in manufacturing and engineering └ MEM16006 Organise and communicate information 	40
MEM12003	<p>Perform precision mechanical measurement</p> <ul style="list-style-type: none"> └ MEM11011 Undertake Manual Handling └ MEM12023 Perform engineering measurements └ MEM13015 Work safely and effectively in manufacturing and engineering └ MEM16006 Organise and communicate information 	20
MEM12023	<p>Perform engineering measurements</p> <ul style="list-style-type: none"> └ MEM13015 Work safely and effectively in manufacturing and engineering └ MEM16006 Organise and communicate information 	50

MEM12024	Perform computations	20
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM16006 Organise and communicate information	
MEM18001	Use hand tools	20
	└ MEM11011 Undertake Manual Handling	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM16006 Organise and communicate information	
MEM18002	Use power tools/hand held operations	20
	└ MEM11011 Undertake Manual Handling	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM16006 Organise and communicate information	
MEM18003	Use tools for precision work	40
	└ MEM11011 Undertake Manual Handling	
	└ MEM12023 Perform engineering measurements	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM16006 Organise and communicate information	
	└ MEM18001 Use hand tools	
	└ MEM18002 Use power tools/hand held operations	
MEM18006	Perform precision fitting of engineering components	40
	└ MEM09002 Interpret technical drawing	
	└ MEM11011 Undertake Manual Handling	
	└ MEM12023 Perform engineering measurements	
	└ MEM12024 Perform Computations	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM14006 Plan work activities	
	└ MEM16006 Organise and communicate information	
	└ MEM18001 Use hand tools	
	└ MEM18002 Use power tools/hand held operations	

	└ MEM18003 Use tools for precision work	
	└ MEM18055 Dismantle, replace and assemble engineering components	
MEM18007	Maintain and repair mechanical drives and mechanical transmission assemblies	40
	└ MEM09002 Interpret technical drawing	
	└ MEM11011 Undertake Manual Handling	
	└ MEM12023 Perform engineering measurements	
	└ MEM12024 Perform Computations	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM14006 Plan work activities	
	└ MEM16006 Organise and communicate information	
	└ MEM18001 Use hand tools	
	└ MEM18002 Use power tools/hand held operations	
	└ MEM18003 Use tools for precision work	
	└ MEM18006 Perform precision fitting of engineering components	
	└ MEM18055 Dismantle, replace and assemble engineering components	
MEM18009	Perform precision levelling and alignment of machines and engineering components	40
	└ MEM09002 Interpret technical drawing	
	└ MEM11011 Undertake Manual Handling	
	└ MEM12023 Perform engineering measurements	
	└ MEM12024 Perform Computations	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM14006 Plan work activities	
	└ MEM16006 Organise and communicate information	
	└ MEM18001 Use hand tools	
	└ MEM18002 Use power tools/hand held operations	
	└ MEM18003 Use tools for precision work	
	└ MEM18006 Perform precision fitting of engineering components	
	└ MEM18055 Dismantle, replace and assemble	

	engineering components	
MEM18055	Dismantle, replace and assemble engineering components └ MEM09002 Interpret technical drawing └ MEM11011 Undertake Manual Handling └ MEM12023 Perform engineering measurements └ MEM13015 Work safely and effectively in manufacturing and engineering └ MEM16006 Organise and communicate information └ MEM18001 Use hand tools └ MEM18002 Use power tools/hand held operations	30
UEECD0007	Apply work health and safety regulations, codes and practices in the workplace	20
UEECD0024	Implement and monitor energy sector WHS policies and procedures	20
UEPOPS003	Apply quality systems to work	20
UEPOPS021	Control permit to work operations	30
UEPOPS041	Facilitate workplace communication	20
UEPOPS047	Maintain quality systems within the team └ UEPOPS003 Apply quality systems to work	20
UEPOPS061	Monitor and implement environmental site plans and procedures	20
UEPOPS127	Plan and organise work	30
Group A 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
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
CPCCCM2007	Use explosive power tools	10
	└ CPCCWHS2001 Apply WHS requirements, policies and procedures in the construction industry	
CPCCLDG3001	Licence to perform dogging	30
CPCCLRG3001	Licence to perform rigging basic level	40
	└ CPCCLDG3001 Licence to perform dogging	
CPCCLRG3002	Licence to perform rigging intermediate level	40
	└ CPCCLRG3001 Licence to perform rigging basic level	
CPCCLSF2001	Licence to erect, alter and dismantle scaffolding basic level	40
MEM09003	Prepare basic engineering drawing	80
	└ MEM09002 Interpret technical drawing	
	└ MEM12023 Perform engineering measurements	
	└ MEM12024 Perform Computations	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM16006 Organise and communicate information	
MEM09004	Perform electrical or electronic detail drafting	80
	└ MEM09002 Interpret technical drawing	
	└ MEM09003 Prepare basic engineering drawing	
	└ MEM12023 Perform engineering measurements	
	└ MEM12024 Perform Computations	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM16006 Organise and communicate information	
MEM09005	Perform basic engineering detail drafting	80
	└ MEM09002 Interpret technical drawing	
	└ MEM09003 Prepare basic engineering drawing	

	└ MEM12023 Perform engineering measurements	
	└ MEM12024 Perform Computations	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM16006 Organise and communicate information	
MEM09006	Perform advanced engineering detail drafting	40
	└ MEM09002 Interpret technical drawing	
	└ MEM09003 Prepare basic engineering drawing	
	└ MEM09005 Perform basic engineering detail drafting	
	└ MEM12023 Perform engineering measurements	
	└ MEM12024 Perform Computations	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM16006 Organise and communicate information	
RIIHAN309F	Conduct telescopic materials handler operations	80
TAEDEL311	Provide work skill instruction	40
TLILIC0003	Licence to operate a forklift truck	40
TLILIC0005	Licence to operate a boom-type elevating work platform (boom length 11 metres or more)	30
TLILIC0040	Licence to operate a non-slewing mobile crane (greater than 3 tonnes capacity)	60
TLILIC0024	Licence to operate a vehicle loading crane (capacity 10 metre tonnes and above)	40
Group B Elective units		Weighting points
MEM05004	Perform routine oxy fuel gas welding	20
	└ MEM11011 Undertake Manual Handling	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM16006 Organise and communicate information	
MEM05007	Perform manual heating and thermal cutting	20
	└ MEM09002 Interpret technical drawing	
	└ MEM11011 Undertake Manual Handling	

	<ul style="list-style-type: none"> └ MEM12023 Perform engineering measurements └ MEM13015 Work safely and effectively in manufacturing and engineering └ MEM16006 Organise and communicate information 	
MEM05012	Perform routine manual metal arc welding <ul style="list-style-type: none"> └ MEM11011 Undertake Manual Handling └ MEM13015 Work safely and effectively in manufacturing and engineering └ MEM16006 Organise and communicate information 	20
MEM11011	Undertake manual handling <ul style="list-style-type: none"> └ MEM13015 Work safely and effectively in manufacturing and engineering └ MEM16006 Organise and communicate information 	20
MEM13015	Work safely and effectively in manufacturing and engineering	20
MEM14006	Plan work activities <ul style="list-style-type: none"> └ MEM13015 Work safely and effectively in manufacturing and engineering └ MEM16006 Organise and communicate information 	20
MEM16006	Organise and communicate information <ul style="list-style-type: none"> └ MEM13015 Work safely and effectively in manufacturing and engineering 	20
MEM18010	Perform equipment condition monitoring and recording <ul style="list-style-type: none"> └ MEM09002 Interpret technical drawing └ MEM11011 Undertake Manual Handling └ MEM12023 Perform engineering measurements └ MEM13015 Work safely and effectively in manufacturing and engineering └ MEM16006 Organise and communicate information └ MEM18001 Use hand tools └ MEM18002 Use power tools/hand held operations └ MEM18055 Dismantle, replace and assemble engineering components 	40
MEM18018	Maintain pneumatic system components	40

	└ MEM09002 Interpret technical drawing	
	└ MEM11011 Undertake Manual Handling	
	└ MEM12023 Perform engineering measurements	
	└ MEM12024 Perform computations	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM14006 Plan work activities	
	└ MEM16006 Organise and communicate information	
	└ MEM18001 Use hand tools	
	└ MEM18002 Use power tools/hand held operations	
	└ MEM18003 Use tools for precision work	
	└ MEM18006 Perform precision fitting of engineering components	
	└ MEM18055 Dismantle, replace and assemble engineering components	
MEM18020	Maintain hydraulic system components	40
	└ MEM09002 Interpret technical drawing	
	└ MEM11011 Undertake Manual Handling	
	└ MEM12023 Perform engineering measurements	
	└ MEM12024 Perform Computations	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM14006 Plan work activities	
	└ MEM16006 Organise and communicate information	
	└ MEM18001 Use hand tools	
	└ MEM18002 Use power tools/hand held operations	
	└ MEM18003 Use tools for precision work	
	└ MEM18006 Perform precision fitting of engineering components	
	└ MEM18055 Dismantle, replace and assemble engineering components	
UEPMNT302	Install and maintain industrial pipe work	40
	└ MEM09002 Interpret technical drawing	
	└ MEM12023 Perform engineering measurements	
	└ MEM18001 Use hand tools	

	<ul style="list-style-type: none">└ MEM18002 Use power tools/hand held operations└ MEM18003 Use tools for precision work└ MEM18006 Perform precision fitting of engineering components└ MEM18055 Dismantle, replace and assemble engineering components	
UEPMNT303	Maintain mechanical valves	40
	<ul style="list-style-type: none">└ MEM09002 Interpret technical drawing└ MEM12023 Perform engineering measurements└ MEM18001 Use hand tools└ MEM18002 Use power tools/hand held operations└ MEM18003 Use tools for precision work└ MEM18006 Perform precision fitting of engineering components└ MEM18055 Dismantle, replace and assemble engineering components	
UEPMNT304	Maintain mechanical pumps	40
	<ul style="list-style-type: none">└ MEM09002 Interpret technical drawing└ MEM12023 Perform engineering measurements└ MEM18001 Use hand tools└ MEM18002 Use power tools/hand held operations└ MEM18003 Use tools for precision work└ MEM18006 Perform precision fitting of engineering components└ MEM18055 Dismantle, replace and assemble engineering components	
UEPMNT305	Maintain industrial fans	40
	<ul style="list-style-type: none">└ MEM09002 Interpret technical drawing└ MEM12023 Perform engineering measurements└ MEM18001 Use hand tools└ MEM18002 Use power tools/hand held operations└ MEM18003 Use tools for precision work└ MEM18006 Perform precision fitting of engineering components└ MEM18055 Dismantle, replace and assemble	

	engineering components	
UEPMNT307	Maintain industrial screens, strainers and filters	20
	└ MEM09002 Interpret technical drawing	
	└ MEM12023 Perform engineering measurements	
	└ MEM18001 Use hand tools	
	└ MEM18002 Use power tools/hand held operations	
	└ MEM18003 Use tools for precision work	
	└ MEM18006 Perform precision fitting of engineering components	
	└ MEM18055 Dismantle, replace and assemble engineering components	
UEPMNT308	Maintain conveyors and associated equipment	40
	└ MEM09002 Interpret technical drawing	
	└ MEM12023 Perform engineering measurements	
	└ MEM18001 Use hand tools	
	└ MEM18002 Use power tools/hand held operations	
	└ MEM18006 Perform precision fitting of engineering components	
	└ MEM18055 Dismantle, replace and assemble engineering components	
UEPMNT309	Maintain material feeders	40
	└ MEM09002 Interpret technical drawing	
	└ MEM12023 Perform engineering measurements	
	└ MEM18001 Use hand tools	
	└ MEM18002 Use power tools/hand held operations	
	└ MEM18003 Use tools for precision work	
	└ MEM18006 Perform precision fitting of engineering components	
	└ MEM18055 Dismantle, replace and assemble engineering components	
UEPMNT310	Maintain material crushers	40
	└ MEM09002 Interpret technical drawing	
	└ MEM12023 Perform engineering measurements	
	└ MEM18001 Use hand tools	

	<ul style="list-style-type: none"> └ MEM18002 Use power tools/hand held operations └ MEM18003 Use tools for precision work └ MEM18006 Perform precision fitting of engineering components └ MEM18055 Dismantle, replace and assemble engineering components 	
UEPMNT312	Maintain industrial pressure vessels	80
	<ul style="list-style-type: none"> └ MEM09002 Interpret technical drawing └ MEM12023 Perform engineering measurements └ MEM18001 Use hand tools └ MEM18002 Use power tools/hand held operations └ MEM18003 Use tools for precision work └ MEM18006 Perform precision fitting of engineering components └ MEM18055 Dismantle, replace and assemble engineering components 	
UEPMNT314	Maintain hydro turbines	100
UEPMNT317	Diagnose and repair faults in mechanical equipment	40
	<ul style="list-style-type: none"> └ MEM09002 Interpret technical drawing └ MEM12023 Perform engineering measurements └ MEM18001 Use hand tools └ MEM18002 Use power tools/hand held operations └ MEM18003 Use tools for precision work └ MEM18006 Perform precision fitting of engineering components └ MEM18055 Dismantle, replace and assemble engineering components 	
UEPMNT318	Conduct generator mechanical maintenance	80
	<ul style="list-style-type: none"> └ MEM09002 Interpret technical drawing └ MEM12023 Perform engineering measurements └ MEM18001 Use hand tools └ MEM18002 Use power tools/hand held operations └ MEM18003 Use tools for precision work └ MEM18006 Perform precision fitting of engineering 	

	components	
	└ MEM18055 Dismantle, replace and assemble engineering components	
UEPMNT340	Fabricate metal structures and components	40
	└ MEM09002 Interpret technical drawing	
	└ MEM12023 Perform engineering measurements	
	└ MEM18001 Use hand tools	
	└ MEM18002 Use power tools/hand held operations	
	└ MEM18003 Use tools for precision work	
	└ MEM18006 Perform precision fitting of engineering components	
	└ MEM18055 Dismantle, replace and assemble engineering components	
UEPMNT367	Install and commission stationary gas fuelled reciprocating engines	60
	└ CPCCWHS1001 Prepare to work safely in the construction industry	
	└ HLTAID009 Provide cardiopulmonary resuscitation	
UEPMNT368	Repair and maintain stationary gas fuelled reciprocating engines	60
	└ CPCCWHS1001 Prepare to work safely in the construction industry	
	└ HLTAID009 Provide cardiopulmonary resuscitation	
UEPOPS017	Conduct single energy source isolation procedures for permit to work	40
Group C Elective units		Weighting points
MEM07011	Perform complex milling operations	40
	└ MEM07005 Perform general machining	
	└ MEM07007 Perform milling operations	
	└ MEM09002 Interpret technical drawing	
	└ MEM11011 Undertake Manual Handling	
	└ MEM12003 Perform precision mechanical measurement	
	└ MEM12023 Perform engineering measurements	

	└ MEM12024 Perform computations	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM14006 Plan work activities	
	└ MEM16006 Organise and communicate information	
	└ MEM18001 Use hand tools	
MEM07012	Perform complex grinding operations	40
	└ MEM07005 Perform general machining	
	└ MEM07008 Perform grinding operations	
	└ MEM09002 Interpret technical drawing	
	└ MEM11011 Undertake Manual Handling	
	└ MEM12003 Perform precision mechanical measurement	
	└ MEM12023 Perform engineering measurements	
	└ MEM12024 Perform computations	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM14006 Plan work activities	
	└ MEM16006 Organise and communicate information	
	└ MEM18001 Use hand tools	
MEM07021	Perform complex lathe operations	40
	└ MEM07005 Perform general machining	
	└ MEM07006 Perform lathe operations	
	└ MEM09002 Interpret technical drawing	
	└ MEM11011 Undertake Manual Handling	
	└ MEM12003 Perform precision mechanical measurement	
	└ MEM12023 Perform engineering measurements	
	└ MEM12024 Perform computations	
	└ MEM13015 Work safely and effectively in manufacturing and engineering	
	└ MEM14006 Plan work activities	
	└ MEM16006 Organise and communicate information	
	└ MEM18001 Use hand tools	
MEM18019	Maintain pneumatic systems	40

	<ul style="list-style-type: none"> └ MEM12023 Perform engineering measurements └ MEM09002 Interpret technical drawing └ MEM11011 Undertake Manual Handling └ MEM12024 Perform computations └ MEM13015 Work safely and effectively in manufacturing and engineering └ MEM14006 Plan work activities └ MEM16006 Organise and communicate information └ MEM18001 Use hand tools └ MEM18002 Use power tools/hand held operations └ MEM18003 Use tools for precision work └ MEM18006 Perform precision fitting of engineering components └ MEM18018 Maintain pneumatic system components └ MEM18055 Dismantle, replace and assemble engineering components 	
MEM18021	Maintain hydraulic systems	40
	<ul style="list-style-type: none"> └ MEM12023 Perform engineering measurements └ MEM09002 Interpret technical drawing └ MEM11011 Undertake Manual Handling └ MEM12024 Perform computations └ MEM13015 Work safely and effectively in manufacturing and engineering └ MEM14006 Plan work activities └ MEM16006 Organise and communicate information └ MEM18001 Use hand tools └ MEM18002 Use power tools/hand held operations └ MEM18003 Use tools for precision work └ MEM18006 Perform precision fitting of engineering components └ MEM18020 Maintain hydraulic system components └ MEM18055 Dismantle, replace and assemble engineering components 	
MEM18022	Maintain fluid power controls	80
	<ul style="list-style-type: none"> └ MEM09002 Interpret technical drawing 	

- └ MEM11011 Undertake Manual Handling
 - └ MEM12023 Perform engineering measurements
 - └ MEM12024 Perform computations
 - └ MEM13015 Work safely and effectively in manufacturing and engineering
 - └ MEM14006 Plan work activities
 - └ MEM16006 Organise and communicate information
 - └ MEM18001 Use hand tools
 - └ MEM18002 Use power tools/hand held operations
 - └ MEM18003 Use tools for precision work
 - └ MEM18006 Perform precision fitting of engineering components
 - └ MEM18055 Dismantle, replace and assemble engineering components
- Plus, one or more of the following, including their prerequisites:
- └ MEM18019 Maintain pneumatic systems
 - └ MEM18021 Maintain hydraulic systems

UEPMNT401	Install and maintain complex mechanical seals └ MEM09002 Interpret technical drawing └ MEM12023 Perform engineering measurements └ MEM18001 Use hand tools └ MEM18002 Use power tools/hand held operations └ MEM18003 Use tools for precision work └ MEM18006 Perform precision fitting of engineering components └ MEM18055 Dismantle, replace and assemble engineering components └ UEPMNT304 Maintain mechanical pumps	40
UEPMNT402	Conduct complex levelling and alignment └ MEM09002 Interpret technical drawing └ MEM12023 Perform engineering measurements └ MEM18001 Use hand tools └ MEM18002 Use power tools/hand held operations └ MEM18003 Use tools for precision work	40

	<ul style="list-style-type: none"> └ MEM18006 Perform precision fitting of engineering components └ MEM18009 Perform levelling and alignment of machines and engineering components └ MEM18055 Dismantle, replace and assemble engineering components 	
UEPMNT403	Maintain complex mechanical valves	40
	<ul style="list-style-type: none"> └ MEM09002 Interpret technical drawing └ MEM12023 Perform engineering measurements └ MEM18001 Use hand tools └ MEM18002 Use power tools/hand held operations └ MEM18003 Use tools for precision work └ MEM18006 Perform precision fitting of engineering components └ MEM18055 Dismantle, replace and assemble engineering components └ UEPMNT303 Maintain mechanical valves 	
UEPMNT404	Maintain complex mechanical pumps	40
	<ul style="list-style-type: none"> └ MEM09002 Interpret technical drawing └ MEM12023 Perform engineering measurements └ MEM1800 Use power tools/hand held operations └ MEM18001 Use hand tools └ MEM18003 Use tools for precision work └ MEM18006 Perform precision fitting of engineering components └ MEM18055 Dismantle, replace and assemble engineering components └ UEPMNT304 Maintain mechanical pumps 	
UEPMNT408	Install hydro turbines	100
	<ul style="list-style-type: none"> └ MEM09002 Interpret technical drawing └ MEM12023 Perform engineering measurements └ MEM18001 Use hand tools └ MEM18002 Use power tools/hand held operations └ MEM18003 Use tools for precision work └ MEM18006 Repair and fit engineering components 	

	<ul style="list-style-type: none"> └ MEM18009 Perform levelling and alignment of machines and engineering components └ MEM18055 Dismantle, replace and assemble engineering components └ UEPMNT402 Conduct complex levelling and alignment 	
UEPMNT419	<p>Perform civil drafting</p> <ul style="list-style-type: none"> └ MEM09002 Interpret technical drawing └ UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications 	60
UEPMNT421	<p>Conduct technical inspection of process plant and equipment</p> <ul style="list-style-type: none"> └ UEECD0019 Fabricate, assemble and dismantle utilities industry components └ UEECD0020 Fix and secure electrotechnology equipment └ UEECD0043 Solve problems in direct current circuits └ UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications └ UEEEL0003 Arrange circuits, control and protection for general electrical installations └ UEEEL0011 Evaluate performance of low voltage electrical apparatus └ UEEEL0014 Isolate, test and troubleshoot low voltage electrical circuits └ UEEEL0020 Solve problems in low voltage a.c. circuits └ UEEEL0021 Solve problems in magnetic and electromagnetic devices └ UEEEL0023 Terminate cables, cords and accessories for low voltage circuits └ UEEEL0024 Test and connect alternating current (a.c.) machines └ UEEEL0025 Test and Connect Transformers └ UEPMNT351 Test and commission electrical equipment 	60
UEPMNT422	<p>Conduct performance testing on process plant and equipment</p> <ul style="list-style-type: none"> └ UEECD0019 Fabricate, assemble and dismantle utilities industry components 	60

- └ UEECD0020 Fix and secure electrotechnology equipment
 - └ UEECD0043 Solve problems in direct current circuits
 - └ UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications
 - └ UEEEL0003 Arrange circuits, control and protection for general electrical installations
 - └ UEEEL0011 Evaluate performance of low voltage electrical apparatus
 - └ UEEEL0014 Isolate, test and troubleshoot low voltage electrical circuits
 - └ UEEEL0020 Solve problems in low voltage a.c. circuits
 - └ UEEEL0021 Solve problems in magnetic and electromagnetic devices
 - └ UEEEL0023 Terminate cables, cords and accessories for low voltage circuits
 - └ UEEEL0024 Test and connect alternating current (a.c.) machines
 - └ UEEEL0025 Test and Connect Transformers
 - └ UEPMNT351 Test and commission electrical equipment
- UEPOPS011 Conduct multiple energy source isolation procedures for permit to work 40
- └ UEPOPS017 Conduct single energy source isolation procedures for permit to work

Qualification Mapping Information

This qualification supersedes and is equivalent to UEP40518 Certificate IV in ESI Generation Maintenance (Mechanical)

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1715b9fa-e7bd-441c-bb8d-cf22c9c825a8>