

UEP Electricity Supply Industry - Generation Sector

TRAINING PACKAGE

Version 3

WA NOMINAL HOURS GUIDE

Introduction

This Guide has been generated to enable the stakeholders in this Industry in Western Australia to participate in the managed implementation of the National UEP Electricity Supply Industry - Generation Sector Training Package.

This Guide is designed to aid Registered Training Organisations (RTOs) to convert from existing Training Package qualifications to new Training Package qualifications within the scope of their training delivery.

The Guide should be read in conjunction with the endorsed components of the Training Package.

Version 3 of the UEP Electricity Supply Industry - Generation Sector Training Package was released by Training.Gov.Au (TGA) on the 13/12/2022.

Transition Arrangements

Registered Training Organisations (RTOs) are required to deliver Training Package qualifications in accordance with the Standards for RTOs. For further information visit the Training Accreditation Council website www.tac.wa.gov.au.

Nominal Hours

Nominal hours are the hours of training notionally required to achieve the outcomes of units of competency.

Nominal hours are identified for nationally endorsed qualifications. Nominal hours may vary for a qualification depending on the selection of units of competency.

In Western Australia, nominal hours are used as a mechanism for funding allocation.

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Qualifications and Nominal Hours

The following table provides a summary of the qualifications and nominal hours in the training package.

National Code	National Title	Nominal Hours
UEP20122	Certificate II in ESI Generation - Operations Support	355
UEP20222	Certificate II in Remote Area Essential Service	414
UEP30322	Certificate III in ESI Generation	888
UEP40122	Certificate IV in ESI Generation	727
UEP40322	Certificate IV in ESI Generation Maintenance - Electrical Electronics	1152
UEP40422	Certificate IV in ESI Generation Maintenance (Fabrication)	1155
UEP40522	Certificate IV in ESI Generation Maintenance (Mechanical)	1155
UEP40622	Certificate IV in Wind Power Generation	632
UEP50122	Diploma of ESI Generation	1035

Skill Sets and Nominal Hours

The following table provides a summary of the skill sets and nominal hours in the training package.

National Code	National Title	Nominal Hours
UEPSS00009	High Risk Licensing - Licence to operate a reciprocating steam engine	54
UEPSS00010	High Risk Licensing - Licence to operate a steam turbine	54
UEPSS00011	High Voltage Operation - Development and coordination of H.V. switching programs	45
UEPSS00012	High Voltage Operation - H.V. switching programs	63
UEPSS00013	Co-ordinate Real-Time Offshore Operations Skill Set	145
UEPSS00014	Managing Network Communications Skill Set	155
UEPSS00015	Managing Site Outages Skill Set	170

Units of Competency and Nominal Hours

The following table provides a summary of the units of competency and nominal hours in the training package.

National Code	National Title	Nominal Hours	Points
UEPMNT001	Carry out routine work activities in an electricity supply industry generation environment	36	
UEPMNT002	Carry out routine work activities in an ESI large scale wind generation environment	18	
UEPMNT003	Coordinate maintenance on a wind farm	54	
UEPMNT004	Diagnose and repair faults in large scale wind turbines	54	
UEPMNT005	Diagnose and repair faults in wind turbine control systems	54	
UEPMNT006	Diagnose and repair faults in wind turbine electrical systems	54	
UEPMNT007	Diagnose and repair mechanical systems faults in wind turbines	45	
UEPMNT008	Maintain and monitor wind farm civil assets	36	
UEPMNT009	Maintain large scale wind turbines	54	
UEPMNT010	Maintain wind turbine control systems	54	
UEPMNT011	Maintain wind turbine electrical systems	54	
UEPMNT012	Maintain wind turbine mechanical systems	54	
UEPMNT013	Monitor climatic conditions for renewable electricity generation	36	
UEPMNT014	Test and commission wind turbines	54	
UEPMNT302	Install and maintain industrial pipe work	36	40
UEPMNT303	Maintain mechanical valves	36	40
UEPMNT304	Maintain mechanical pumps	36	40
UEPMNT305	Maintain industrial fans	36	40
UEPMNT307	Maintain industrial screens, strainers and filters	18	20
UEPMNT308	Maintain conveyors and associated equipment	36	40
UEPMNT309	Maintain material feeders	36	40
UEPMNT310	Maintain material crushers	30	40
UEPMNT312	Maintain industrial pressure vessels	72	80

UEPMNT314	Maintain hydro turbines	90	100
UEPMNT317	Diagnose and repair faults in mechanical equipment	36	40
UEPMNT318	Conduct generator mechanical maintenance	72	80
UEPMNT340	Fabricate metal structures and components	36	40
UEPMNT346	Maintain electrical equipment	36	40
UEPMNT347	Maintain complex electrical equipment	54	60
UEPMNT348	Maintain electrical electronic equipment	36	40
UEPMNT350	Modify electrical equipment	36	40
UEPMNT351	Test and commission electrical equipment	36	40
UEPMNT355	Install complex electronic instrumentation equipment	36	40
UEPMNT356	Maintain instrumentation equipment	36	40
UEPMNT357	Diagnose and repair faults in instrumentation equipment	54	60
UEPMNT358	Modify instrumentation equipment	36	40
UEPMNT359	Test and commission instrumentation equipment	36	40
UEPMNT366	Maintain power plant inverter systems	54	60
UEPMNT367	Install and commission stationary gas fuelled reciprocating engines	54	60
UEPMNT368	Repair and maintain stationary gas fuelled reciprocating engines	54	60
UEPMNT401	Install and maintain complex mechanical seals	36	40
UEPMNT402	Conduct complex levelling and alignment	36	40
UEPMNT403	Maintain complex mechanical valves	36	40
UEPMNT404	Maintain complex mechanical pumps	36	40
UEPMNT408	Install hydro turbines	90	100
UEPMNT410	Diagnose and repair faults in electronic equipment	54	60
UEPMNT411	Diagnose and repair faults in complex electrical equipment	54	60
UEPMNT412	Modify complex electrical equipment	54	60
UEPMNT414	Test and commission complex electrical equipment	54	60
UEPMNT417	Inspect electrical generators and diagnose faults	72	80

UEPMNT419	Perform civil drafting	54	60
UEPMNT421	Conduct technical inspection of process plant and equipment	54	60
UEPMNT422	Conduct performance testing on process plant and equipment	54	60
UEPMNT425	Maintain complex instrumentation equipment	72	80
UEPMNT427	Diagnose and repair faults in complex instrumentation equipment	72	80
UEPMNT428	Modify complex instrumentation equipment	72	80
UEPMNT430	Test and commission complex instrumentation equipment	72	80
UEPMNT433	Conduct routine generator electrical maintenance	54	60
UEPMNT440	Diagnose and repair faults in power plant inverter systems	54	60
UEPOPL003	Licence to operate a reciprocating steam engine	54	
UEPOPL004	Licence to operate a steam turbine	54	
UEPOPS001	Analyse single protection device operation	54	
UEPOPS002	Apply environmental and sustainable energy procedures	18	
UEPOPS003	Apply quality systems to work	18	
UEPOPS004	Carry out operational checks on in-service electrical plant	36	40
UEPOPS005	Clean plant and equipment	18	
UEPOPS006	Collect and analyse hydrological and meteorological data	18	
UEPOPS007	Conduct chemical batching operations	27	
UEPOPS008	Operate and monitor control room site in a multi-function environment	25	
UEPOPS009	Conduct minor electrical maintenance	36	
UEPOPS010	Conduct minor mechanical maintenance	36	
UEPOPS011	Conduct multiple energy source isolation procedures for permit to work	36	40
UEPOPS012	Conduct non-routine operational testing	54	
UEPOPS013	Conduct operational checks and carry out corrective action on in-service electrical plant	36	
UEPOPS014	Conduct operational checks on in-service mechanical plant	36	
UEPOPS015	Conduct project management	54	
UEPOPS016	Conduct routine wind turbine maintenance	36	

UEPOPS017	Conduct single energy source isolation procedures for permit to work	36	40
UEPOPS018	Conduct water conveyance and control	27	
UEPOPS019	Control electrical energy production	36	
UEPOPS020	Control hydro generation pumping	54	
UEPOPS021	Control permit to work operations	27	20
UEPOPS022	Coordinate and direct switching program	54	
UEPOPS023	Coordinate electrical energy production	54	
UEPOPS024	Coordinate first response team operation	18	
UEPOPS025	Coordinate local H.V. networks	27	
UEPOPS026	Coordinate network/system	27	
UEPOPS027	Coordinate operational strategies for power production	18	
UEPOPS028	Coordinate permit to work system	36	
UEPOPS029	Coordinate photovoltaic solar power plant operations	54	
UEPOPS030	Coordinate power generation	36	
UEPOPS031	Coordinate response to critical incidents	27	
UEPOPS032	Coordinate team activities	27	
UEPOPS033	Coordinate the use of contingency plans	36	
UEPOPS034	Coordinate wind farm operations	36	
UEPOPS035	Coordinate workplace communication	36	
UEPOPS036	Develop H.V. switching programs	18	
UEPOPS037	Ensure compliance with work health and safety policy and procedures	18	
UEPOPS038	Evaluate cost estimations and initiate appropriate solutions	36	
UEPOPS039	Evaluate scheduling of generation plant	54	
UEPOPS040	Facilitate the use of contingency plans for power generation facilities	54	
UEPOPS041	Facilitate workplace communication	18	20
UEPOPS042	Implement dam safety surveillance procedures	27	
UEPOPS043	Interpret and analyse multi-operation protection devices	18	

UEPOPS044	Liase with stakeholders	18	
UEPOPS045	Maintain and utilise records	18	
UEPOPS046	Maintain battery banks and cells	27	
UEPOPS047	Maintain quality systems within the team	18	
UEPOPS048	Manage commissioning and decommissioning	72	
UEPOPS049	Manage critical incidents	54	
UEPOPS050	Manage environmental management systems	36	
UEPOPS051	Manage first response team	36	
UEPOPS052	Manage high voltage network system	72	
UEPOPS053	Manage operational crisis to maintain or restore power system integrity	54	
UEPOPS054	Manage operational strategies for power production	72	
UEPOPS055	Manage permit to work system	36	
UEPOPS056	Manage quality control procedures	36	
UEPOPS057	Manage system restart	36	
UEPOPS058	Manage work health and safety policy and procedures	36	
UEPOPS059	Manage, operate and monitor a gas turbine unit	54	
UEPOPS060	Monitor and coordinate the operation of a combined cycle gas turbine unit	54	
UEPOPS061	Monitor and implement environmental site plans and procedures	18	20
UEPOPS062	Monitor and maintain civil assets	27	
UEPOPS063	Monitor and maintain wind farm civil assets	36	
UEPOPS064	Monitor climatic conditions for renewable energy production	36	
UEPOPS065	Monitor implementation of quality control for production and maintenance	18	
UEPOPS066	Monitor power generation plant reliability	54	
UEPOPS067	Monitor the implementation of under frequency load shedding	54	
UEPOPS068	Operate a hydro generator synchronous condenser pump unit	54	
UEPOPS069	Operate air conditioning plant	27	
UEPOPS070	Operate and monitor a boiler unit	54	

UEPOPS071	Operate and monitor a heat recovery steam generator unit	18	
UEPOPS072	Operate and monitor a hydro turbine	54	
UEPOPS073	Operate and monitor a steam turbine	54	
UEPOPS075	Operate and monitor a.c. electrical systems	27	
UEPOPS076	Operate and monitor air conditioning plant and ventilation systems	18	
UEPOPS077	Operate and monitor alkalinity reduction plant	27	
UEPOPS078	Operate and monitor an internal combustion dual fuel reciprocating engine	36	
UEPOPS079	Operate and monitor an internal combustion single fuel reciprocating engine	36	
UEPOPS080	Operate and monitor ash and dust disposal plant	36	
UEPOPS081	Operate and monitor auxiliary steam systems	36	
UEPOPS082	Operate and monitor boiler draught system	36	
UEPOPS083	Operate and monitor boiler steam/water cycle	36	
UEPOPS084	Operate and monitor brine concentrator plant	27	
UEPOPS085	Operate and monitor communications system	18	
UEPOPS086	Operate and monitor compressed air systems	27	
UEPOPS087	Operate and monitor compressed gas systems	27	
UEPOPS088	Operate and monitor condenser and auxiliary cooling systems	36	
UEPOPS089	Operate and monitor d.c. electrical systems	18	
UEPOPS090	Operate and monitor dual fuel firing plant	72	
UEPOPS091	Operate and monitor dust collection plant	36	
UEPOPS092	Operate and monitor fixed fire protection systems	27	
UEPOPS093	Operate and monitor flue gas (NOx) mitigation systems	27	
UEPOPS094	Operate and monitor fuel firing plant - coal	36	
UEPOPS095	Operate and monitor fuel firing plant - gas/oil	36	
UEPOPS096	Operate and monitor fuel supply	18	
UEPOPS097	Operate and monitor fuel supply - coal	36	
UEPOPS098	Operate and monitor gas production plant	27	

UEPOPS099	Operate and monitor generator/alternator	54	
UEPOPS100	Operate and monitor heat exchangers and cooling systems	36	
UEPOPS101	Operate and monitor HRSG hot gas control system	36	
UEPOPS102	Operate and monitor hydro plant auxiliary systems	54	
UEPOPS103	Operate and monitor hydro unit control and protection systems	72	
UEPOPS104	Operate and monitor oil systems	27	
UEPOPS105	Operate and monitor reverse osmosis plant	27	
UEPOPS106	Operate and monitor site services water systems	27	
UEPOPS107	Operate and monitor supervisory control and data acquisition systems	54	
UEPOPS108	Operate and monitor system equipment	27	
UEPOPS109	Operate and monitor water quality monitoring systems	27	
UEPOPS110	Operate and monitor water systems condensate and feedwater	36	
UEPOPS111	Operate and monitor water treatment plant	27	
UEPOPS112	Operate bulk coal handling plant	36	
UEPOPS113	Operate fabric filter dust collection plant	18	
UEPOPS114	Operate H.V. condition changing apparatus	54	
UEPOPS115	Operate hydroelectric generating plant and auxiliary equipment	54	
UEPOPS116	Operate local H.V. switchgear	36	40
UEPOPS117	Operate local L.V. switchgear	36	
UEPOPS118	Operate manual systems	27	
UEPOPS119	Operate waste and contaminated water plant	27	
UEPOPS120	Undertake operational commissioning and decommissioning	27	
UEPOPS121	Perform plant lubrication	18	
UEPOPS122	Perform process plant inspections	27	
UEPOPS123	Perform risk analysis of generation plant	18	
UEPOPS124	Perform switching to a switching program	27	
UEPOPS125	Perform tool store duties	18	

UEPOPS126	Plan a scheduled outage	18	
UEPOPS127	Plan and organise work	27	30
UEPOPS128	Produce maintenance plans for generation production plant	27	
UEPOPS129	Produce maintenance strategies for generation production plant	72	
UEPOPS130	Respond to a critical incident	36	
UEPOPS131	Run up a steam turbine	54	
UEPOPS132	Schedule generation	18	
UEPOPS133	Shut down a boiler unit	54	
UEPOPS134	Shut down a gas turbine	54	
UEPOPS135	Shut down a heat recovery steam generator unit	27	
UEPOPS136	Shut down a hydro turbine	54	
UEPOPS137	Shut down a steam turbine	27	
UEPOPS138	Start and run up gas turbine	54	
UEPOPS139	Start and run up a hydro turbine	54	
UEPOPS140	Start up a boiler unit	54	
UEPOPS141	Start up a heat recovery steam generator unit	27	
UEPOPS142	Transport plant and equipment	18	
UEPOPS143	Tune process plant and equipment	54	
UEPOPS144	Undertake dam safety surveillance	27	
UEPOPS145	Undertake local systems operations	27	
UEPOPS146	Operate and monitor hydro plant/systems	25	
UEPOPS148	Operate and monitor local grid operations control room	35	
UEPOPS150	Operate and monitor multiple facilities from single control room	25	
UEPOPS152	Operate Renewable Energy Generation and Storage systems	25	

Mapping Qualifications

The following table provides an overview of the qualifications from Version 3 which replace qualifications from the existing version of the UEP Electricity Supply Industry - Generation Sector Training Package.

UEP Current Qualification				UEP Replacement Qualification		
National Code	National Title	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
UEP30122	Certificate III in ESI Generation	0	E	UEP30322	Certificate III in ESI Generation	888

Mapping Skill Sets

The following table provides an overview of the skill sets from Version 3 which replace skill sets from the existing version of the UEP Electricity Supply Industry - Generation Sector Training Package.

UEP Current Skill Set				UEP Replacement Skill Set		
National Code	National Title	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
			-	UEPSS00013	Co-ordinate Real-Time Offshore Operations Skill Set	145
			-	UEPSS00014	Managing Network Communications Skill Set	155
			-	UEPSS00015	Managing Site Outages Skill Set	170

Mapping Units of Competency

The following table provides an overview of the units of competency from Version 3 which replace units of competency from the existing version of the UEP Electricity Supply Industry - Generation Sector Training Package.

UEP Current Unit				UEP Replacement Unit		
National Code	National Title	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
			-	UEPOPS008	Operate and monitor control room site in a multi-function environment	25
			-	UEPOPS146	Operate and monitor hydro plant/systems	25
			-	UEPOPS148	Operate and monitor local grid operations control room	35
			-	UEPOPS150	Operate and monitor multiple facilities from single control room	25
			-	UEPOPS152	Operate Renewable Energy Generation and Storage systems	25

Apprenticeships

The following table provides a summary of the apprenticeships that have been affected by changes in this UEP Electricity Supply Industry - Generation Sector Training Package update.

Please refer to the current *Register of Class A and B qualifications* found on the Department of Training and Workforce Development website for the official list of apprenticeships in Western Australia.

UEP Current Qualification					UEP Replacement Qualification		
National Code	National Title	Apprenticeship	Nominal Hours	E / NE	National Code	National Title	Nominal Hours

No changes occurred between UEP v2 and v3.

Traineeships

The following table provides a summary of the traineeships that have been affected by changes in this UEP Electricity Supply Industry - Generation Sector Training Package update.

Please refer to the current *Register of Class A and B qualifications* found on the Department of Training and Workforce Development website for the official list of apprenticeships in Western Australia.

UEP Current Qualification					UEP Replacement Qualification		
National Code	National Title	Traineeship	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
UEP30122	Certificate III in ESI Generation	TR03620: ESI GENERATION (OPERATIONS) (LEVEL 3)	0	E	UEP30322	Certificate III in ESI Generation	888

Pre-Apprenticeships

The following table provides a summary of the pre-apprenticeships that have been affected by changes in this UEP Electricity Supply Industry - Generation Sector Training Package update.

Please refer to the current *list of pre-apprenticeship courses* found on the Department of Training and Workforce Development website for the official list of pre-apprenticeships in Western Australia.

UEP Current Qualification					UEP Replacement Qualification		
National Code	National Title	Pre-Apprenticeship	Nominal Hours	E / NE	National Code	National Title	Nominal Hours

No changes occurred between UEP v2 and v3.