

# **UET TRANSMISSION, DISTRIBUTION AND RAIL SECTOR**

## **TRAINING PACKAGE**

### **Version 5**

## **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 UET Transmission, Distribution and Rail 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 5 of the UET Transmission, Distribution and Rail Sector was released by Training.Gov.Au (TGA) on the 06/12/2022

## 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](http://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
UET20321	Certificate II in ESI - Powerline Vegetation Control	341
UET20422	Certificate II in Transmission Line Construction	451
UET20621	Certificate II in ESI - Asset Inspection and Testing	324
UET30521	Certificate III in ESI - Transmission Overhead	1070
UET30621	Certificate III in ESI - Distribution Overhead	1018
UET30721	Certificate III in ESI - Rail Traction	1185
UET30821	Certificate III in ESI - Distribution Underground	1043
UET30921	Certificate III in ESI - Very Remote Community Utilities	990
UET40422	Certificate IV in ESI - Network Systems	462
UET40522	Certificate IV in ESI - Substations	519
UET60222	Advanced Diploma of ESI - Power Systems	623

## 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
UETSS00054	Maintain Energised Rail Traction Networks Skill Set	70
UETSS00055	Work Safely Around Powerlines as an Ordinary Person Skill Set	35

## 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
UETDRAI001	Inspect and test poles at and below ground level	36	
UETDRAI002	Inspect poles, hardware and electrical apparatus	36	
UETDRAI003	Perform minor maintenance on electricity network assets	36	40
UETDRAI004	Treat poles	20	
UETDRAI005	Use asset inspection equipment	36	40
UETDRCD001	Work safely around powerlines as an ordinary person	35	
UETDRDO001	Inspect overhead poles, structures and electrical apparatus	40	50
UETDRDO003	Maintain energised high voltage distribution overhead electrical apparatus (glove and barrier)	63	70
UETDRDO004	Maintain energised high voltage distribution overhead electrical apparatus (stick)	63	70
UETDRDO005	Maintain overhead energised low voltage distribution network	54	60
UETDRDO006	Maintain, test and verify distribution overhead network	36	40
UETDRDS015	Assess distributed energy resource connections to a distribution network	90	
UETDRDS016	Coordinate and perform line and easement surveys	35	
UETDRDS017	Design customer substations	90	
UETDRDS018	Design distribution protection systems	45	
UETDRDS019	Design distribution substations	55	
UETDRDS020	Design overhead distribution systems	55	
UETDRDS021	Design public lighting systems	55	
UETDRDS022	Design underground distribution systems	55	
UETDRDS023	Draft and layout distribution substation minor upgrade	35	
UETDRDS024	Draft and layout overhead distribution extension	35	
UETDRDS025	Draft and layout street lighting system	35	
UETDRDS026	Draft and layout underground distribution extension	35	

UETDRDS027	Investigate quality of supply issues	80	
UETDRDS028	Prepare and manage construction plans for electrical infrastructure	55	
UETDRDU001	Conduct high voltage testing of underground power cable system	45	50
UETDRDU002	Inspect underground electrical apparatus	25	
UETDRDU007	Install and maintain underground public lighting	36	
UETDRDU009	Install, test and verify distribution underground cable installations	36	40
UETDRDU010	Joint, terminate and maintain energised low voltage underground paper insulated cable	54	60
UETDRDU011	Joint, terminate and maintain energised low voltage underground polymeric cable	45	50
UETDRDU012	Joint, terminate and maintain high voltage underground paper insulated cable	54	60
UETDRDU013	Joint, terminate and maintain high voltage underground polymeric cable	45	50
UETDRDU014	Joint, terminate and maintain low voltage underground paper insulated cable	36	40
UETDRDU015	Joint, terminate and maintain low voltage underground polymeric cable	60	50
UETDRDU016	Lay power cables	18	20
UETDRDU017	Locate faults in underground power cables	54	60
UETDRDU019	Transition joint high voltage paper insulated cable to high voltage polymeric cable	45	50
UETDRDU020	Joint, terminate and maintain gas and oil filled underground cables	35	
UETDRDU021	Joint, terminate and maintain underground polymeric cable 33kV and above	35	
UETDRDU022	Maintain gas and oil pressure systems for underground cables	35	
UETDREL001	Apply environmental requirements	18	20
UETDREL002	Comply with environmental requirements	36	40
UETDREL003	Identify and apply controls for alternate supplies on the distribution network	25	
UETDREL004	Operate plant and equipment in the vicinity of live electrical apparatus	36	40
UETDREL005	Work safely in the vicinity of live electrical apparatus	18	20
UETDREL006	Work safely in the vicinity of live electrical apparatus as a non-electrical worker	36	40
UETDRIS007	Install and maintain distribution overhead conductors and cables	54	60
UETDRIS008	Install and maintain electrical apparatus	90	
UETDRIS010	Install and maintain low voltage overhead services	36	40

UETDRIS011	Install and maintain low voltage underground services	36	40
UETDRIS012	Install and maintain poles, structures and hardware	45	50
UETDRIS013	Install and maintain public lighting systems	36	40
UETDRIS014	Install and replace energy meters and associated equipment	45	50
UETDRIS015	Install low voltage mobile generator	45	50
UETDRIS017	Perform high voltage field switching operation to a given schedule	45	50
UETDRIS018	Perform low voltage field switching operation to a given schedule	45	50
UETDRIS020	Contribute to coordinated high voltage live work	25	
UETDRIS021	Coordinate and direct switching programs	35	
UETDRIS022	Coordinate permit procedures	35	
UETDRIS023	Develop and validate high voltage distribution switching programs	35	
UETDRIS024	Develop and validate low voltage distribution switching programs	35	
UETDRIS025	Diagnose and resolve faults in distribution systems	35	
UETDRIS026	Diagnose and resolve faults in electrical apparatus	55	
UETDRIS027	Diagnose and resolve faults in transmission systems	55	
UETDRIS028	Implement and monitor environmental policies and procedures	25	
UETDRIS029	Implement and monitor organisational WHS/OHS policies, procedures and programs	25	
UETDRIS030	Install high voltage mobile generator	25	
UETDRIS031	Maintain insulating oil	15	
UETDRIS032	Solve problems in network equipment	35	
UETDRIS033	Solve problems in network protection	35	
UETDRMP001	Apply access authority procedures to work on or near electrical apparatus	6	
UETDRMP002	ESI safety rules for work on, near or in the vicinity of electrical apparatus	4	
UETDRMP003	Perform cable pit/trench/excavation rescue	6	
UETDRMP004	Perform elevated work platform controlled descent escape	6	
UETDRMP005	Perform elevated work platform rescue	6	
UETDRMP006	Perform pole top rescue	6	

UETDRMP007	Perform rescue from a live low voltage panel	6	
UETDRMP008	Perform rescue from switchyard structures	6	
UETDRMP009	Perform tower rescue	12	
UETDRMP010	Provide first aid in an ESI environment	6	
UETDRMP011	Testing of connections to low voltage electricity networks	16	
UETDRMP012	Working on energised low voltage overhead electrical apparatus	20	
UETDRMP013	Working on energised low voltage underground electrical apparatus	20	
UETDRRC001	Install and maintain low voltage overhead services in a very remote community	36	40
UETDRRC002	Install and maintain low voltage underground services in a very remote community	36	40
UETDRRC003	Install and maintain public lighting systems in a very remote community	36	40
UETDRRC004	Install and replace energy meters and associated equipment in a very remote community	45	50
UETDRRC005	Maintain, test and verify power systems in a very remote community	70	
UETDRRC006	Perform low voltage electricity network switching in a very remote community	36	40
UETDRRC007	Solve problems in electrical network apparatus in a very remote community	72	80
UETDRRC008	Solve problems in low voltage electrical network circuits in a very remote community	72	80
UETDRRT001	Install overhead rail traction configurations	45	50
UETDRRT002	Install overhead traction components and equipment	45	50
UETDRRT003	Install rail traction bonds	36	40
UETDRRT004	Install traction overhead wiring systems	45	50
UETDRRT008	Maintain overhead rail traction configurations	54	60
UETDRRT009	Maintain overhead traction components and equipment	54	60
UETDRRT010	Maintain rail traction bonds	45	50
UETDRRT011	Maintain traction overhead wiring systems	54	60
UETDRRT012	Operate rail road height access plant near rail traction systems	18	20
UETDRRT013	Perform rail traction switching operations to a given schedule	45	50
UETDRRT014	Test and verify rail traction installations	36	40
UETDRRT015	Maintain energised rail traction networks	70	

UETDRSB001	Perform substation switching operations to a given schedule	45	50
UETDRSB002	Commission and maintain discrete control and protection systems	25	
UETDRSB003	Commission and maintain distribution field devices	25	
UETDRSB004	Conduct surveys using thermovision techniques	20	
UETDRSB005	Diagnose and resolve faults in a substation environment	20	
UETDRSB006	Inspect substations	20	
UETDRSB007	Install and maintain substation direct current systems	20	
UETDRSB008	Install high current d.c. equipment and switchgear	25	
UETDRSB009	Install high voltage plant and equipment	25	
UETDRSB010	Maintain capacitor bank equipment	20	
UETDRSB011	Maintain high current d.c. equipment and switchgear	25	
UETDRSB012	Maintain high voltage circuit breakers	20	
UETDRSB013	Maintain on-load tap changers (OLTC)	25	
UETDRSB014	Maintain power and instrument transformers	20	
UETDRSB015	Maintain static var compensators (SVC)	25	
UETDRSB016	Maintain synchronous condensers	25	
UETDRSO012	Coordinate and manage distribution and sub-transmission network access and activities	70	
UETDRSO013	Coordinate and manage transmission network access and activities	70	
UETDRSO014	Coordinate operations in a regulated energy market	90	
UETDRSO015	Develop and validate distribution and sub-transmission switching programs	55	
UETDRSO016	Develop and validate low voltage switching programs	55	
UETDRSO017	Develop and validate transmission switching programs	55	
UETDRSO018	Dispatch and monitor field staff activities	55	
UETDRSO019	Manage supply and demand in distribution and sub-transmission networks	90	
UETDRSO020	Operate SCADA equipment	70	
UETDRSO021	Respond to protection operations	125	
UETDRTO004	Inspect and maintain transmission overhead network	36	40

UETDRTO005	Inspect transmission structures, conductors and hardware	36	40
UETDRTO006	Install and maintain transmission conductors	54	60
UETDRTO007	Install and maintain transmission structures and hardware	90	
UETDRTO010	Maintain energised transmission lines using barehand techniques from a helicopter	54	60
UETDRTO011	Maintain energised transmission lines using live work barehand techniques	63	70
UETDRTO012	Maintain energised transmission lines using live work stick techniques	63	70
UETDRTO015	Assemble and erect transmission structures	45	
UETDRTO016	Install transmission structure hardware	25	
UETDRTO017	String overhead transmission conductors	35	
UETDRTS028	Calibrate, verify and certify revenue metering/energy measurement instruments	35	
UETDRTS029	Commission and maintain communication equipment	55	
UETDRTS030	Commission and maintain complex energy/revenue metering schemes	55	
UETDRTS031	Commission and maintain energy/revenue metering schemes	25	
UETDRTS032	Commission and maintain metering schemes	35	
UETDRTS033	Commission and maintain network protection and control systems	55	
UETDRTS034	Commission and maintain voltage regulating equipment	35	
UETDRTS035	Conduct evaluation of network protection and control system faults	55	
UETDRTS036	Develop secondary protection and control scheme isolation and restoration documents	35	
UETDRTS037	Maintain and calibrate protection relays and meters	35	
UETDRTS038	Perform accuracy checks on instrument transformers	35	
UETDRTS039	Perform current injection testing of secondary devices	35	
UETDRVC001	Apply work health and safety requirements for powerline vegetation control	20	
UETDRVC002	Assess vegetation in an electricity supply industry environment	72	80
UETDRVC003	Control vegetation for powerline work	36	40
UETDRVC004	Control vegetation in the vicinity of live electrical apparatus from an elevated work platform	27	30
UETDRVC005	Control vegetation in the vicinity of live electrical apparatus from ground level	54	60
UETDRVC006	Control vegetation in the vicinity of live electrical apparatus from within the tree	27	30

UETDRVC007	Control vegetation using pruning techniques	45	50
UETDRVC009	Monitor vegetation control work in the vicinity of live electrical apparatus	54	60
UETDRVC010	Perform rescue from within a tree in the vicinity of live electrical apparatus	18	20
UETDRVC011	Use specialised plant to cut vegetation above ground in the vicinity of live electrical apparatus	27	30
UETDRVC012	Coordinate vegetation control operations	35	

## Mapping Qualifications

The following table provides an overview of the qualifications from version 5 which replace qualifications from the existing version of the UET Transmission, Distribution and Rail Sector Training Package.

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

No changes occurred between versions 4 and 5.

## Mapping Skill Sets

The following table provides an overview of the skill sets from version 5 which replace skill sets from the existing version of the UET Transmission, Distribution and Rail Sector Training Package.

Current Skill Set				Replacement Skill Set		
National Code	National Title	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
			New	UETSS00055	Work Safely Around Powerlines as an Ordinary Person Skill Set	35

### Mapping Units of Competency

The following table provides an overview of the units of competency from version 5 which replace units of competency from the existing version of the UET Transmission, Distribution and Rail Sector Training Package.

UET Current Unit				UET Replacement Unit		
National Code	National Title	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
			New	UETDRCD001	Work safely around powerlines as an ordinary person	35

## Apprenticeships

The following table provides a summary of the apprenticeships that have been affected by changes in this UET Transmission, Distribution and Rail 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.

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

No changes occurred between versions 4 and 5.

## Traineeships

The following table provides a summary of the traineeships that have been affected by changes in this UET Transmission, Distribution and Rail 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.

Current Qualification					Replacement Qualification		
National Code	National Title	Traineeship	Nominal Hours	E / NE	National Code	National Title	Nominal Hours

No changes occurred between versions 4 and 5.

## Pre-apprenticeships

The following table provides a summary of the pre-apprenticeships that have been affected by changes in this UET Transmission, Distribution and Rail 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.

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

No changes occurred between versions 4 and 5.