

Victorian Purchasing Guide

UET Transmission, Distribution and Rail Sector
Training Package

Release 4.0

December 2022



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Victorian Purchasing Guide - Release History

Note: RTOs should refer to the [National Register](#) for the detail of changes in each Release.

Training Package Release	Date VPG Approved	Comments
Release 4.0	1 December 2022	<p>This guide reflects the changes made in release 4.0 of the UET Transmission, Distribution and Rail Sector Training Package</p> <p>Note the following qualifications:</p> <ul style="list-style-type: none"> • UET40422 Certificate IV in ESI – Network Systems • UET40522 Certificate IV in ESI – Substations • UET60222 Advanced Diploma of ESI – Power Systems • UET20321 Certificate II in ESI - Powerline Vegetation Control • UET30621 Certificate III in ESI - Distribution Overhead • UET30821 Certificate III in ESI – Distribution Underground <p>In addition to the changes made to units for release 4, the following UoC, has been updated from release 2 to 3:</p> <ul style="list-style-type: none"> • UETDRIS017 Perform high voltage field switching operation to a given schedule. <p>Please refer to the Release 4.0 of the UET Transmission, Distribution and Rail Sector Companion Volume Implementation Guide for further details.</p>
Release 3.0	11 August 2022	<p>The purchasing guide reflects the changes made in release 3.0 of the UET Transmission, Distribution and Rail Sector Training Package:</p> <ul style="list-style-type: none"> • UET20422 Certificate II in Transmission Line Construction <p>The following qualification has been removed:</p> <ul style="list-style-type: none"> • UET20421 Certificate II in Transmission Structure and Line Assembly <p>The following qualifications have been updated:</p> <ul style="list-style-type: none"> • UET20321 Certificate II in ESI - Powerline Vegetation Control • UET30521 Certificate III in ESI - Transmission Overhead • UET30721 Certificate III in ESI - Rail Traction • UET50221 Diploma of ESI - Power Systems • UET50321 Diploma of ESI - Power Systems Operations <p>The following Units of Competency have been added:</p> <ul style="list-style-type: none"> • UETDRTO015 Assemble and erect transmission structures • UETDRTO016 Install transmission structure hardware • UETDRTO017 String overhead transmission conductors • <p>The following Units of Competency have been removed:</p> <ul style="list-style-type: none"> • UETDRTO001 Erect power systems transmission structure hardware

Training Package Release	Date VPG Approved	Comments
		<ul style="list-style-type: none"> • UETDRTO002 Erect power systems transmission structures • UETDRTO013 - Pre-tension stringing overhead transmission conductors and cables • <p>The following Units of Competency have been deleted:</p> <ul style="list-style-type: none"> • UETDRTO003 Establish and reinstate a power systems transmission structure work site • UETDRTO014 Set-up and install transmission structure stubs <p>The following Unit of Competency has been updated:</p> <ul style="list-style-type: none"> • UETDRIS017 Perform high voltage field switching operation to a given schedule. <p>Please refer to the Release 3.0 of the UET Transmission, Distribution and Rail Sector Companion Volume Implementation Guide for further details.</p>
Release 2.0	22 November 2021	<p>This Victorian Purchasing Guide reflects Release 2.0 for the UET Transmission, Distribution and Rail Sector Training Package and consists of:</p> <ul style="list-style-type: none"> • Qualifications: <ul style="list-style-type: none"> ○ Fourteen (14) transitioned and updated from Release 1.0 ○ Two (2) deleted due to zero enrolments. • Units of competency: <ul style="list-style-type: none"> ○ Six (6) new units ○ One hundred and fifty-six (156) transitioned from Release 1.0 ○ Thirty-three (33) units with no change ○ Thirty-four (34) units deleted including twenty-seven (27) due to zero enrolments
Release 1.0	16 October 2019	<p>This is the first release of this Training Package.</p> <p>This release of UET updates all qualifications and units of competency to the 2012 Standards for Training Packages</p> <p>Supersedes UET12 Transmission, Distribution and Rail Sector Training Package Release 2.1</p>

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Introduction

What is a Victorian Purchasing Guide?

The Victorian Purchasing Guide provides information for use by Registered Training Organisations (RTOs) in the provision of Victorian government subsidised training.

Specifically, the Victorian Purchasing Guide provides the following information related to the delivery of nationally endorsed Training Packages in Victoria:

- The maximum and minimum payable hours available for each qualification.
- Nominal hours for each unit of competency within the Training Package.

Registration

RTOs must be registered by either the Victorian Registration and Qualifications Authority (VRQA) or the Australian Skills Qualification Authority (ASQA) regulatory body to be eligible to issue qualifications and Statements of Attainment under the Australian Qualifications Framework (AQF).

The VRQA is the regulatory authority in Victoria responsible for the registration of Vocational Education and Training (VET) providers who offer courses to domestic students in Victoria only.

ASQA is the regulatory authority responsible for the registration of VET providers who offer training in Victoria, nationally and / or internationally.

Transition

The relationship between new units and any superseded or replaced units from the previous version of UET Transmission, Distribution and Rail Sector Training Package Release 3.0 is provided in the Training Package Companion Volume Implementation Guide. (See VETnet.gov.au for more information).

Information regarding transition arrangements can be obtained from the state or national VET Regulatory Authority (see Contacts and Links section).

RTOs must ensure that all training and assessment leading to issuance of qualifications or Statements of Attainment from the UET Transmission, Distribution and Rail Sector Training Package Release 3.0 is conducted against the Training Package units of competency and complies with the assessment requirements.

Qualifications

Code	Title	Minimum Payable Hours	Maximum Payable Hours
UET20321	Certificate II in ESI - Powerline Vegetation Control	323	340
UET20422	Certificate II in Transmission Line Construction	595	626
UET20621	Certificate II in ESI - Asset Inspection and Testing	280	295
UET30521	Certificate III in ESI - Transmission Overhead	1032	1086
UET30621	Certificate III in ESI - Distribution Overhead	1064	1120
UET30721	Certificate III in ESI - Rail Traction	1435	1511
UET30821	Certificate III in ESI - Distribution Underground	1040	1095
UET30921	Certificate III in ESI - Very Remote Community Utilities	1093	1150
UET40422	Certificate IV in ESI - Network Systems	352	370
UET40522	Certificate IV in ESI - Substations	618	650
UET60222	Advanced Diploma of ESI - Power Systems	798	840

Units of Competency and Nominal Hours

Unit Code	Unit Title	Nominal Hours
UETDRAI001	Inspect and test poles at and below ground level	20
UETDRAI002	Inspect poles, hardware and electrical apparatus	30
UETDRAI003	Perform minor maintenance on electricity network assets	40
UETDRAI004	Treat poles	20
UETDRAI005	Use asset inspection equipment	40
UETDRDO001	Inspect overhead poles, structures and electrical apparatus	60
UETDRDO003	Maintain energised high voltage distribution overhead electrical apparatus (glove and barrier)	70
UETDRDO004	Maintain energised high voltage distribution overhead electrical apparatus (stick)	70
UETDRDO005	Maintain overhead energised low voltage distribution network	60
UETDRDO006	Maintain, test and verify distribution overhead network	40
UETDRDS015	Assess distributed energy resource connections to a distribution network	100
UETDRDS016	Coordinate and perform line and easement surveys	40
UETDRDS017	Design customer substations	100
UETDRDS018	Design distribution protection systems	50
UETDRDS019	Design distribution substations	60
UETDRDS020	Design overhead distribution systems	60
UETDRDS021	Design public lighting systems	60
UETDRDS022	Design underground distribution systems	60
UETDRDS023	Draft and layout distribution substation minor upgrade	40
UETDRDS024	Draft and layout overhead distribution extension	40

Unit Code	Unit Title	Nominal Hours
UETDRDS025	Draft and layout street lighting system	40
UETDRDS026	Draft and layout underground distribution extension	40
UETDRDS027	Investigate quality of supply issues	90
UETDRDS028	Prepare and manage construction plans for electrical infrastructure	60
UETDRDU001	Conduct high voltage testing of underground power cable system	60
UETDRDU002	Inspect underground electrical apparatus	30
UETDRDU007	Install and maintain underground public lighting	40
UETDRDU009	Install, test and verify distribution underground cable installations	40
UETDRDU010	Joint, terminate and maintain energised low voltage underground paper insulated cable	60
UETDRDU011	Joint, terminate and maintain energised low voltage underground polymeric cable	60
UETDRDU012	Joint, terminate and maintain high voltage underground paper insulated cable	60
UETDRDU013	Joint, terminate and maintain high voltage underground polymeric cable	60
UETDRDU014	Joint, terminate and maintain low voltage underground paper insulated cable	60
UETDRDU015	Joint, terminate and maintain low voltage underground polymeric cable	60
UETDRDU016	Lay power cables	20
UETDRDU017	Locate faults in underground power cables	65
UETDRDU019	Transition joint high voltage paper insulated cable to high voltage polymeric cable	60
UETDRDU020	Joint, terminate and maintain gas and oil filled underground cables	40
UETDRDU021	Joint, terminate and maintain underground polymeric cable 33kV and above	40
UETDRDU022	Maintain gas and oil pressure systems for underground cables	40

Unit Code	Unit Title	Nominal Hours
UETDREL001	Apply environmental requirements	40
UETDREL002	Comply with environmental requirements	40
UETDREL003	Identify and apply controls for alternate supplies on the distribution network	30
UETDREL004	Operate plant and equipment in the vicinity of live electrical apparatus	40
UETDREL005	Work safely in the vicinity of live electrical apparatus	20
UETDREL006	Work safely in the vicinity of live electrical apparatus as a non-electrical worker	40
UETDRIS007	Install and maintain distribution overhead conductors and cables	60
UETDRIS008	Install and maintain electrical apparatus	60
UETDRIS010	Install and maintain low voltage overhead services	40
UETDRIS011	Install and maintain low voltage underground services	40
UETDRIS012	Install and maintain poles, structures and hardware	60
UETDRIS013	Install and maintain public lighting systems	40
UETDRIS014	Install and replace energy meters and associated equipment	60
UETDRIS015	Install low voltage mobile generator	60
UETDRIS017	Perform high voltage field switching operation to a given schedule	40
UETDRIS018	Perform low voltage field switching operation to a given schedule	40
UETDRIS020	Contribute to coordinated HV live work	30
UETDRIS021	Coordinate and direct switching programs	40
UETDRIS022	Coordinate permit procedures	40
UETDRIS023	Develop and validate high voltage distribution switching programs	40
UETDRIS024	Develop and validate low voltage distribution switching programs	40

Unit Code	Unit Title	Nominal Hours
UETDRIS025	Diagnose and resolve faults in distribution systems	40
UETDRIS026	Diagnose and resolve faults in electrical apparatus	60
UETDRIS027	Diagnose and resolve faults in transmission systems	60
UETDRIS028	Implement and monitor environmental policies and procedures	30
UETDRIS029	Implement and monitor organisational WHS/OHS policies, procedures and programs	30
UETDRIS030	Install high voltage mobile generator	30
UETDRIS031	Maintain insulating oil	15
UETDRIS032	Solve problems in network equipment	40
UETDRIS033	Solve problems in network protection	40
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

Unit Code	Unit Title	Nominal Hours
UETDRMP013	Working on Energised Low Voltage Underground Electrical Apparatus	20
UETDRRC001	Install and maintain low voltage overhead services in a very remote community	40
UETDRRC002	Install and maintain low voltage underground services in a very remote community	40
UETDRRC003	Install and maintain public lighting systems in a very remote community	40
UETDRRC004	Install and replace energy meters and associated equipment in a very remote community	50
UETDRRC005	Maintain, test and verify power systems in a very remote community	80
UETDRRC006	Perform low voltage electricity network switching in a very remote community	40
UETDRRC007	Solve problems in electrical network apparatus in a very remote community	80
UETDRRC008	Solve problems in low voltage electrical network circuits in a very remote community	80
UETDRRT001	Install overhead rail traction configurations	60
UETDRRT002	Install overhead traction components and equipment	60
UETDRRT003	Install rail traction bonds	40
UETDRRT004	Install traction overhead wiring systems	60
UETDRRT008	Maintain overhead rail traction configurations	60
UETDRRT009	Maintain overhead traction components and equipment	60
UETDRRT010	Maintain rail traction bonds	60
UETDRRT011	Maintain traction overhead wiring systems	60
UETDRRT012	Operate rail road height access plant near rail traction systems	25
UETDRRT013	Perform rail traction switching operations to a given schedule	40
UETDRRT014	Test and verify rail traction installations	40

Unit Code	Unit Title	Nominal Hours
UETDRRT015	Maintain energised rail traction networks	80
UETDRSB001	Perform substation switching operations to a given schedule	40
UETDRSB002	Commission and maintain discrete control and protection systems	30
UETDRSB003	Commission and maintain distribution field devices	30
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	30
UETDRSB009	Install high voltage plant and equipment	30
UETDRSB010	Maintain capacitor bank equipment	20
UETDRSB011	Maintain high current d.c. equipment and switchgear	30
UETDRSB012	Maintain high voltage circuit breakers	20
UETDRSB013	Maintain on-load tap changers (OLTC)	30
UETDRSB014	Maintain power and instrument transformers	20
UETDRSB015	Maintain static var compensators (SVC)	30
UETDRSB016	Maintain synchronous condensers	30
UETDRSO012	Coordinate and manage distribution and sub-transmission network access and activities	80
UETDRSO013	Coordinate and manage transmission network access and activities	80
UETDRSO014	Coordinate operations in a regulated energy market	100
UETDRSO015	Develop and validate distribution and sub-transmission switching programs	60
UETDRSO016	Develop and validate low voltage switching programs	60

Unit Code	Unit Title	Nominal Hours
UETDRSO017	Develop and validate transmission switching programs	60
UETDRSO018	Dispatch and monitor field staff activities	60
UETDRSO019	Manage supply and demand in distribution and sub-transmission networks	100
UETDRSO020	Operate SCADA equipment	80
UETDRSO021	Respond to protection operations	140
UETDRTO004	Inspect and maintain transmission overhead network	40
UETDRTO005	Inspect transmission structures, conductors and hardware	60
UETDRTO006	Install and maintain transmission conductors	60
UETDRTO007	Install and maintain transmission structures and hardware	100
UETDRTO010	Maintain energised transmission lines using barehand techniques from a helicopter	60
UETDRTO011	Maintain energised transmission lines using live work barehand techniques	70
UETDRTO012	Maintain energised transmission lines using live work stick techniques	70
UETDRTO015	Assemble and erect transmission structures	50
UETDRTO016	Install transmission structure hardware	30
UETDRTO017	String overhead transmission conductors	40
UETDRTS028	Calibrate, verify and certify revenue metering/energy measurement instruments	40
UETDRTS029	Commission and maintain communication equipment	60
UETDRTS030	Commission and maintain complex energy/revenue metering schemes	60
UETDRTS031	Commission and maintain energy/revenue metering schemes	30
UETDRTS032	Commission and maintain metering schemes	40
UETDRTS033	Commission and maintain network protection and control systems	60

Unit Code	Unit Title	Nominal Hours
UETDRTS034	Commission and maintain voltage regulating equipment	40
UETDRTS035	Conduct evaluation of network protection and control system faults	60
UETDRTS036	Develop secondary protection and control scheme isolation and restoration documents	40
UETDRTS037	Maintain and calibrate protection relays and meters	40
UETDRTS038	Perform accuracy checks on instrument transformers	40
UETDRTS039	Perform current injection testing of secondary devices	40
UETDRVC001	Apply work health and safety requirements for powerline vegetation control	20
UETDRVC002	Assess vegetation in an electricity supply industry environment	50
UETDRVC003	Control vegetation for powerline work	40
UETDRVC004	Control vegetation in the vicinity of live electrical apparatus from an elevated work platform	45
UETDRVC005	Control vegetation in the vicinity of live electrical apparatus from ground level	45
UETDRVC006	Control vegetation in the vicinity of live electrical apparatus from within the tree	50
UETDRVC007	Control vegetation using pruning techniques	50
UETDRVC009	Monitor vegetation control work in the vicinity of live electrical apparatus	50
UETDRVC010	Perform rescue from within a tree in the vicinity of live electrical apparatus	20
UETDRVC011	Use specialised plant to cut vegetation above ground in the vicinity of live electrical apparatus	30
UETDRVC012	Coordinate vegetation control operations	40

Contacts and Links

Curriculum Maintenance Manager (CMM) Service

Engineering Industries

The CMM Service is provided on behalf of Higher Education and Skills.

CMM Service Executive Officers can assist with questions on payable and nominal hours.

Steve Bryant

Box Hill Institute

465 Elgar Rd, Box Hill Vic. 3128

Office: (03) 92869934

Mobile: 0479184251

Email: cmmei@boxhill.edu.au

Service Skills Organisation (SSO) – Australian Industry Standards (AIS)

Australian Industry Standards is responsible for developing the UET Transmission, Distribution and Rail Sector Training Package and can be contacted for further information.

Address: Level 2, 31 Market Street, South Melbourne

Phone: (03) 9604 7200

Email: <https://www.australianindustrystandards.org.au/contact-us/>

Website: <http://www.australianindustrystandards.org.au/>

National Register of VET in Australia - Training.gov.au (TGA)

TGA is the Australian government's official National Register of information on Training Packages, qualifications, courses, units of competency and RTOs. See training.gov.au for more information.

Australian Government - Department of Employment and Workplace Relations (DEWR)

The Commonwealth Department is responsible for national policies and programmes that help Australians access quality vocational education and training. See [Skills and Training - DEWR](#) for more information.

State Government - Department of Education and Training (DET)

DET is the State Training Authority responsible for supporting implementation of Vocational Education and Training (VET) in Victoria. See education.vic.gov.au for more information. (03) 9637 2000

National VET Regulatory Authority - Australian Skills Quality Authority (ASQA)

ASQA is the national regulator for Australia's VET sector. Info line: 1300 701 801 See asqa.gov.au for more information.

State VET Regulatory Authority - Victorian Registration and Qualifications Authority (VRQA)

The VRQA is a statutory authority responsible for the registration and regulation of Victorian RTOs and for the regulation of apprenticeships and traineeships in Victoria. (03) 9637 2806 See vrqa.vic.gov.au

Industry Regulatory Bodies

WorkSafe Victoria

The industry Regulatory body can provide advice on licensing, legislative or regulatory requirements which may impact on the delivery of training or the issuance of qualifications in this Training Package. WorkSafe needs to provide written verification before high risk work units can be added to an RTO's scope of registration. info@worksafe.vic.gov.au See worksafe.vic.gov.au for further information.

222 Exhibition Street,
Melbourne 3000
(03) 9641 1444 or
1800 136 089 (toll free)

info@worksafe.vic.gov.au

See worksafe.vic.gov.au for further information.

Energy Safe Victoria (ESV)

The industry Regulatory body can provide advice on licensing, legislative or regulatory requirements which may impact on the delivery of training or the issuance of qualifications in this Training Package.

Level 5, 4 Riverside Quay, Southbank VIC 3006
(03) 9203 9700 or
1800 800 158 (free call)

info@energysafe.vic.gov.au

See <https://esv.vic.gov.au/> for further information.

Glossary

Code	Nationally endorsed Training Package qualification code.
Title	Nationally endorsed Training Package qualification title.
Unit Code	Nationally endorsed Training Package unit code.
Unit Title	Nationally endorsed Training Package unit title.
Maximum Payable Hours	<p>The maximum number of hours the Victorian Government will subsidise under Skills First funding for the achievement of the minimum realistic vocational outcome of the qualification, as determined by the qualification packaging rules. The Maximum Payable Hours do not cover every possible combination of core and elective units available for a specific qualification.</p> <p>Minimum payable hours reflect a calculated minimum number of hours that could deliver a minimum realistic vocational outcome, based on efficiencies of contextualisation and integration.</p>
Scope of Registration	Scope of registration specifies the AQF qualifications and/or units of competency the training organisation is registered to issue and the industry training and/or assessment services it is registered to provide.
Nominal Hours	Nominal hours reflect the anticipated time taken to deliver and assess the outcomes of a unit of competency excluding unsupervised delivery or the time taken for repeated practical application of skills. Nominal hours are determined by the Victorian State Training Authority (DET) and are primarily developed for funding purposes in Victoria.