**Victorian Purchasing Guide**

**for**

 **UET12 Electricity Supply Industry-Transmission, Distribution and Rail Sector Training Package**

**Version 2**

**April 2013**



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Victorian Purchasing Guide ⎯ Version History

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| Training Package Version  | Date VPGApproved | Comments |
| UET12 Electricity Supply Industry – Transmission, Distribution and Rail Sector Training Package 2 | 17th April 2013 | * 2 new qualifications

o UET50312 Diploma of ESI — Power Systems Operations o UET60312 Advanced Diploma of ESI — Power Systems Operations |
| UET12 Electricity Supply Industry – Transmission, Distribution and Rail Sector Training Package 1 | 22nd November 2012 | * Initial release
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**UET12 Electricity Supply Industry – Transmission, Distribution and Rail Sector Training Package**

**Victorian Purchasing Guide**

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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 nominal hour range (minimum-maximum) available for each qualification.
* Nominal hours for each unit of competency within the Training Package.
* Sample Training Programs

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 Quality Framework (AQF).

The VRQA is the regulatory authority for Victoria that registers VET training organisations who provide courses to domestic students only and who only offer training in Victoria.

To register to provide training to international students and in other Australian states and territories you will need to apply with ASQA.

QUALIFICATIONS

| **Code** | **Title** | **Qualification Nominal Hour Range**  |
| --- | --- | --- |
| **Min** | **Max** |
| UET20312 | Certificate II in ESI – Powerline Vegetation Control | 355 | 400 |
| UET20412 | Certificate II in Transmission Structure and Line Assembly | 369 | 398 |
| UET20511 | Certificate II in National Broadband Network Cabling (Electricity Supply Industry Assets) | 360 | 360 |
| UET20612 | Certificate II in ESI — Asset Inspection | 350 | 360 |
| UET30512 | Certificate III in ESI — Power Systems - Transmission Overhead | 1155 | 1230 |
| UET30612 | Certificate III in ESI — Power Systems - Distribution Overhead | 1175 | 1190 |
| UET30712 | Certificate III in ESI — Power Systems - Rail Traction | 1150 | 1210 |
| UET30812 | Certificate III in ESI — Power Systems - Distribution Cable Jointing | 1135 | 1230 |
| UET30912 | Certificate III in ESI — Remote Community Utilities Worker | 1090 | 1210 |
| UET40412 | Certificate IV in ESI — Network Systems | 1435 | 1510 |
| UET40512 | Certificate IV in ESI — Power Systems Substations | 1290 | 1330 |
| UET40612 | Certificate IV in ESI — Power Systems Network Infrastructure | 1330 | 1400 |
| UET50212 | Diploma of ESI — Power Systems | 1530 | 1580 |
| UET50312 | Diploma of ESI — Power Systems Operations | 1610 | 1660 |
| UET60212 | Advanced Diploma of ESI — Power Systems | 1920 | 2080 |
| UET60312 | Advanced Diploma of ESI — Power Systems Operations | 1900 | 2010 |

UNITS OF COMPETENCY AND NOMINAL HOURS

RTOs are advised that there is a mapping inside the Training Package that describes the relationship between new units and superseded or replaced units from the previous version of **UET12 Electricity Supply Industry – Transmission, Distribution and Rail Sector Training Package Training Package.**  Information regarding transition arrangements can be obtained from the state or national VET Regulating Authority (see Contacts and Links section).

You must be sure that all training and assessment leading to qualifications or Statements of Attainment from the **UET12 Electricity Supply Industry – Transmission, Distribution and Rail Sector Training Package Training Package** is conducted against the Training Package units of competency and complies with the requirements in the assessment guidelines.

Listing of the Units of Competency and Nominal Hours

| Unit Code | Unit Title | Nominal Hours |
| --- | --- | --- |
| UETTDRCJ21A | Lay ESI electrical cables | 20 |
| UETTDRCJ22A | Install and maintain de-energised low voltage underground paper insulated cables. | 60 |
| UETTDRCJ23A | Install and maintain de-energised high voltage underground paper insulated cables. | 60 |
| UETTDRCJ24A | Joint and maintain energised low voltage underground paper insulated cables | 60 |
| UETTDRCJ25A | Perform straight through high voltage paper insulated to polymeric transition joint | 60 |
| UETTDRCJ26A | Install and maintain de-energised low voltage underground polymeric cables.  | 60 |
| UETTDRCJ27A | Install and maintain de-energised high voltage underground polymeric cables.  | 60 |
| UETTDRCJ28A | Joint and maintain energised low voltage underground polymeric cables  | 60 |
| UETTDRCJ29A | Install gas and oil filled specialised underground cables  | 60 |
| UETTDRCJ30A | Maintain gas and oil filled specialised underground cables | 60 |
| UETTDRCJ31A | Install and maintain polymeric specialised underground cables | 65 |
| UETTDRCJ32A | Install and maintain gas and oil pressure systems for specialised underground cables | 65 |
| UETTDRCJ33A | Install and maintain network infrastructure LV underground cables | 40 |
| UETTDRCJ34A | Install and maintain network infrastructure HV underground cables  | 50 |
| UETTDRCJ99A | Test and verify distribution cable jointing installations  | 40 |
| UETTDRDP11A | Inspect overhead poles/structures and electrical apparatus | 60 |
| UETTDRDP12A | Maintain overhead energised low voltage conductors and cables | 60 |
| UETTDRDP13A | Maintain energised HV distribution overhead electrical apparatus (stick) | 70 |
| UETTDRDP14A | Maintain energised HV distribution overhead electrical apparatus (glove) | 70 |
| UETTDRDP15A | Inspect, maintain and restore energised low voltage overhead distribution network infrastructure | 50 |
| UETTDRDP99A | Test and verify distribution overhead installations | 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 |
| UETTDRDS35A | Design overhead distribution power systems  | 90 |
| UETTDRDS36A | Design underground distribution power systems  | 90 |
| UETTDRDS37A | Design power system distribution substations  | 90 |
| UETTDRDS38A | Design power system public lighting systems  | 90 |
| UETTDRDS39A | Prepare and manage detailed construction plans for electrical power system infrastructure  | 90 |
| UETTDRDS40A | Prepare and appraise power systems financial impact statements  | 130 |
| UETTDRDS41A | Manage electrical power systems infrastructure projects  | 130 |
| UETTDRDS42A | Investigate quality of power systems supply issues  | 90 |
| UETTDRDS43A | Develop high voltage and low voltage distribution protection systems  | 100 |
| UETTDRDS44A | Design power system zone substations modifications  | 105 |
| UETTDRDS45A | Organise and implement ESI line and easement surveys  | 90 |
| UETTDRDS46A | Develop planned power systems outage strategies  | 90 |
| UETTDRDS47A | Review power system asset management strategies  | 120 |
| UETTDRDS48A | Analyse and appraise power system fault and outage data  | 120 |
| UETTDRDS49A | Establish and manage power system geographical information systems data  | 90 |
| UETTDRDS50A | Design customer power system substations  | 100 |
| UETTDRDS51A | Manage power system transmission and sub-transmission design process  | 120 |
| UETTDRDS52A | Design power system transmission, sub-transmission and zone substation buildings  | 130 |
| UETTDRDS53A | Design power system transmission and sub-transmission substation primary plant | 140 |
| UETTDRDS54A | Design power system transmission and sub-transmission protection and control  | 140 |
| UETTDRDS55A | Design power system transmission and sub-transmission substation earthing  | 130 |
| UETTDRDS56A | Design power system transmission, sub-transmission and zone substation – civil and structural components  | 130 |
| UETTDRDS57A | Design power system overhead transmission systems  | 130 |
| UETTDRDS58A | Design underground transmission systems  | 130 |
| UETTDREL11A | Apply sustainable energy and environmental procedures  | 40 |
| UETTDREL12A | Operate plant and equipment near live electrical conductors and apparatus  | 40 |
| UETTDREL13A | Comply with sustainability, environmental and incidental response policies and procedures | 40 |
| UETTDREL14A | Working safely near live electrical apparatus as a non-electrical worker  | 40 |
| UETTDREL15A | Respond to power systems technical enquiries and requests  | 60 |
| UETTDREL16A | Working safely near live electrical apparatus  | 20 |
| UETTDREL17A | Operate asset inspection machinery and equipment near live electrical apparatus  | 40 |
| UETTDREL18A | Inspect and treat poles and inspect electrical apparatus  | 40 |
| UETTDREL19A | Identify and interpret characteristics of electrical apparatus associated with power industry assets  | 40 |
| UETTDREL20A | Undertake minor vegetation control and routine minor maintenance of poles and electrical apparatus  | 40 |
| UETTDREL21A | Operate specialised data information equipment near live electrical apparatus  | 40 |
| UETTDRIS32A | Solve electrical problems in remote community network apparatus  | 80 |
| UETTDRIS33A | Solve electrical problems in remote community network systems  | 80 |
| UETTDRIS34A | Install and replace energy meters and associated equipment in remote communities  | 50 |
| UETTDRIS35A | Perform remote community network field switching to a given schedule  | 40 |
| UETTDRIS36A | Install and maintain low voltage services in remote communities (overhead)  | 40 |
| UETTDRIS37A | Install and maintain low voltage services in remote communities (underground)  | 40 |
| UETTDRIS38A | Install and maintain public lighting systems in remote communities  | 40 |
| UETTDRIS41A | Install network infrastructure electrical equipment  | 60 |
| UETTDRIS42A | Maintain network infrastructure electrical equipment  | 60 |
| UETTDRIS43A | Perform low voltage field switching operation to a given schedule.  | 40 |
| UETTDRIS44A | Perform HV field switching operation to a given schedule  | 40 |
| UETTDRIS45A | Install and maintain ESI overhead distribution network infrastructure  | 40 |
| UETTDRIS46A | Install and maintain ESI network infrastructure electrical equipment  | 40 |
| UETTDRIS47A | Sample, filter, test and reinstate insulating oil  | 20 |
| UETTDRIS48A | Develop high voltage switching schedule  | 60 |
| UETTDRIS49A | Develop low voltage switching schedule  | 60 |
| UETTDRIS50A | Coordinate power system permit procedures  | 60 |
| UETTDRIS51A | Coordinate and direct power system switching schedules  | 60 |
| UETTDRIS52A | Install and maintain poles, structures and associated hardware  | 60 |
| UETTDRIS53A | Install and maintain power system public lighting  | 40 |
| UETTDRIS54A | Install and maintain poles, structures, overhead conductors and cables  | 60 |
| UETTDRIS55A | Install and maintain low voltage underground services  | 40 |
| UETTDRIS56A | Install and maintain low voltage overhead services  | 40 |
| UETTDRIS57A | Conduct visual checking and treatment of power system poles and structures  | 25 |
| UETTDRIS58A | Locate faults in power system underground power cables  | 65 |
| UETTDRIS59A | Conduct high potential testing of power system underground power cables  | 60 |
| UETTDRIS60A | Install and replace power system energy meters and associated equipment  | 60 |
| UETTDRIS61A | Install mobile Generation set for synchronised LV Genset  | 60 |
| UETTDRIS62A | Implement and monitor the power system organisational OHS policies, procedures and programs  | 60 |
| UETTDRIS63A | Implement and monitor the power system environmental and sustainable energy management policies and procedures  | 60 |
| UETTDRIS64A | Install mobile Generation set for synchronised HV Genset  | 40 |
| UETTDRIS65A | Contribute to coordinated HV live working  | 50 |
| UETTDRIS66A | Manage an electricity power system OHS management system  | 100 |
| UETTDRIS67A | Solve problems in energy supply network equipment  | 80 |
| UETTDRIS68A | Solve problems in energy supply network protection equipment and systems  | 40 |
| 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 |
| UETTDRIS73A | Develop engineering solutions for energy supply power transformer problems  | 60 |
| UETTDRIS74A | Develop engineering solutions for energy supply system protection problems  | 60 |
| UETTDRIS81A | Install and maintain telecommunications infrastructure on electricity supply industry assets | 80 |
| UETTDRIS99A | Test and verify distribution remote area installations  | 40 |
| UETTDRRF01B | Apply ESI safety rules, codes of practice and procedures for work on or near electrical apparatus  | 0 |
| UETTDRRF02B | Perform pole top rescue  | 0 |
| UETTDRRF03B | Perform EWP rescue  | 0 |
| UETTDRRF04B | Perform tower rescue  | 0 |
| UETTDRRF05B | Perform rescue from switchyard structures at heights  | 0 |
| UETTDRRF06B | Perform rescue from a live LV panel  | 0 |
| UETTDRRF07B | Perform cable pit/trench/excavation rescue  | 0 |
| UETTDRRF08B | Perform EWP controlled descent escape  | 0 |
| UETTDRRF09B | Apply access procedures to work on or near electrical network infrastructure  | 0 |
| UETTDRRF10B | Provide first aid in an ESI environment  | 0 |
| UETTDRRF11A | Testing of connections to low voltage electricity networks  | 0 |
| UETTDRRT21A | Install traction overhead wiring systems  | 60 |
| UETTDRRT22A | Maintain traction overhead wiring systems  | 60 |
| UETTDRRT23A | Install rail traction bonds  | 40 |
| UETTDRRT24A | Maintain rail traction bonds  | 60 |
| UETTDRRT25A | Install overhead rail traction configurations  | 60 |
| UETTDRRT26A | Maintain overhead rail traction configurations  | 60 |
| UETTDRRT27A | Install overhead traction components and equipment  | 60 |
| UETTDRRT28A | Maintain overhead traction components and equipment  | 60 |
| UETTDRRT29A | Operate rail road traction height access equipment.  | 25 |
| UETTDRRT30A | Perform to a given schedule rail traction switching operations  | 40 |
| UETTDRRT31A | Maintain energised d.c. traction overhead wiring system  | 60 |
| UETTDRRT32A | Maintain energised traction overhead electrical apparatus using stick techniques  | 70 |
| UETTDRRT33A | Maintain energised traction overhead electrical apparatus using glove techniques  | 70 |
| UETTDRRT34A | Install and maintain traction network wiring systems  | 40 |
| UETTDRRT35A | Install and maintain traction network equipment and components  | 40 |
| UETTDRRT36A | Maintain traction network wiring systems  | 40 |
| UETTDRRT37A | Maintain traction network components and equipment  | 40 |
| UETTDRRT99A | Test and verify rail traction installations  | 40 |
| UETTDRSB21A | Diagnose and rectify faults in substation environment  | 20 |
| UETTDRSB22A | Carry out power systems substation inspection  | 20 |
| UETTDRSB23A | Install and maintain substation direct current systems  | 20 |
| UETTDRSB24A | Maintain high voltage power system circuit breakers  | 20 |
| UETTDRSB25A | Maintain high voltage power and instrument transformers  | 20 |
| UETTDRSB26A | Install high current DC equipment and switchgear  | 30 |
| UETTDRSB27A | Maintain high current DC equipment and switchgear  | 30 |
| UETTDRSB29A | Maintain capacitor bank equipment for voltage regulation  | 30 |
| UETTDRSB30A | Maintain high voltage power system static VAR compensators (SVC)  | 30 |
| UETTDRSB31A | Maintain high voltage power system synchronous condensers  | 30 |
| UETTDRSB32A | Maintain power transformer on load tap changers (OLTC)  | 30 |
| UETTDRSB33A | Install high voltage plant and equipment  | 30 |
| UETTDRSB34A | Carry out surveys using thermovision techniques  | 20 |
| UETTDRSB35A | Maintain discrete control and protection systems  | 30 |
| UETTDRSB36A | Commission discrete control and protection systems  | 30 |
| UETTDRSB37A | Maintain power system distribution field devices  | 30 |
| UETTDRSB38A | Commission power system distribution field devices  | 30 |
| UETTDRSB39A | Perform power system substation switching operation to a given schedule  | 40 |
| UETTDRSO32A | Manage power systems network faults  | 140 |
| UETTDRSO33A | Manage power systems critical events  | 140 |
| UETTDRSO34A | Control power systems generating plant  | 120 |
| UETTDRSO35A | Manage high voltage distribution and subtransmission network demand  | 140 |
| UETTDRSO36A | Develop low voltage distribution switching programs  | 100 |
| UETTDRSO37A | Develop high voltage distribution and subtransmission switching programs  | 100 |
| UETTDRSO38A | Develop and evaluate power systems transmission switching programs  | 100 |
| UETTDRSO39A | Coordinate low voltage distribution networks  | 100 |
| UETTDRSO40A | Coordinate high voltage distribution and subtransmission networks  | 100 |
| UETTDRSO41A | Manage power systems transmission networks  | 130 |
| UETTDRSO42A | Manage power systems transmission network demand  | 130 |
| UETTDRSO43A | Coordinate low voltage distribution network demand  | 100 |
| UETTDRSO44A | Develop crisis power systems management plans  | 100 |
| UETTDRSO45A | Operate and monitor system SCADA equipment  | 100 |
| UETTDRSO46A | Monitor and control the field staff activities  | 100 |
| UETTDRSO47A | Coordinate high voltage transmission network  | 100 |
| UETTDRSO48A | Respond to discrete and interdependent protection operations  | 100 |
| UETTDRSO49A | Coordinate power system operations in a regulated energy market  | 100 |
| UETTDRSO50A | Respond to complex power system protection operations  | 140 |
| UETTDRSO51A | Manage network systems power flows  | 140 |
| UETTDRTP22A | Establish and reinstate a power systems transmission structure work site  | 90 |
| UETTDRTP23A | Erect power systems transmission structures  | 100 |
| UETTDRTP24A | Erect power systems transmission structure hardware  | 80 |
| UETTDRTP25A | Pre-tension stringing overhead transmission conductors and cables  | 90 |
| UETTDRTP26A | Install transmission structures and associated hardware  | 60 |
| UETTDRTP27A | Maintain transmission structures and associated hardware  | 60 |
| UETTDRTP28A | Set-up and install transmission structure stubs  | 50 |
| UETTDRTP29A | Install and maintain transmission overhead conductors and cables  | 60 |
| UETTDRTP30A | Inspect transmission overhead structures and electrical apparatus  | 60 |
| UETTDRTP31A | Maintain energised transmission lines using live line stick technique  | 70 |
| UETTDRTP32A | Maintain energised transmission lines using Barehand Technique  | 70 |
| UETTDRTP33A | Maintain energised transmission lines using Barehand Technique on a helicopter platform  | 60 |
| UETTDRTP34A | Install/maintain overhead transmission network infrastructure  | 40 |
| UETTDRTP35A | Install/maintain transmission network infrastructure electrical equipment  | 40 |
| UETTDRTP99A | Test and verify transmission overhead installations  | 40 |
| UETTDRTS21A | Maintain interdependent network protection and control systems |  100 |
| UETTDRTS22A | Commission interdependent network protection and control systems |  100 |
| UETTDRTS23A | Conduct evaluation of power system substation faults  | 120 |
| UETTDRTS24A | Design testing and commissioning procedures for field devices and substations  | 120 |
| UETTDRTS25A | Maintain and test and metering schemes  | 90 |
| UETTDRTS26A | Commission power systems metering schemes  | 100 |
| UETTDRTS27A | Perform accuracy checks on power systems instrument transformers  | 100 |
| UETTDRTS28A | Repair, test and calibrate protection relays and meters  | 100 |
| UETTDRTS29A | Develop power systems secondary isolation instructional documents  | 100 |
| UETTDRTS30A | Design power systems secondary isolation instructional documents  | 130 |
| UETTDRTS31A | Maintain, test and commission power systems voltage regulating equipment  | 80 |
| UETTDRTS32A | Conduct evaluation of power systems primary plant  | 130 |
| UETTDRTS33A | Undertake power systems project management of substation augmentation and maintenance  | 140 |
| UETTDRTS34A | Install and maintain power system communication equipment  | 100 |
| UETTDRTS35A | Maintain complex network protection and control systems  | 140 |
| UETTDRTS36A | Commission complex network protection and control systems  | 140 |
| UETTDRTS37A | Perform current injection testing using phantom load  | 40 |
| UETTDRTS38A | Install and replace high voltage metering and associated equipment  | 40 |
| UETTDRTS39A | Maintain compliance with national electricity market metrology practices and procedures | 30 |
| UETTDRTS40A | Test and maintain energy revenue metering schemes | 30 |
| UETTDRTS41A | Install and replace complex energy revenue metering schemes and associated equipment | 30 |
| UETTDRTS42A | Install and replace complex energy revenue metering schemes and associated equipment | 30 |
| UETTDRTS43A | Commission energy revenue metering schemes | 30 |
| UETTDRTS44A | Test and maintain energy revenue metering schemes (complex) | 40 |
| UETTDRTS45A | Manage compliance with national electricity market metrology practices and procedures | 40 |
| UETTDRTS46A | Verification and certification of revenue metering energy measurement instruments | 40 |
| UETTDRTS47A | Commission energy revenue metering schemes (complex) | 40 |
| UETTDRVC21A | Use climbing techniques to cut vegetation above ground near live electrical apparatus  | 50 |
| UETTDRVC23A | Plan the removal of vegetation up to vegetation exclusion zone near live electrical apparatus  | 50 |
| UETTDRVC24A | Assess vegetation and recommend control measures in an ESI environment  | 50 |
| UETTDRVC25A | Use elevated platform to cut vegetation above ground level near live electrical apparatus  | 45 |
| UETTDRVC26A | Cut vegetation at ground level near live electrical apparatus  | 45 |
| UETTDRVC27A | Monitor safety compliance of vegetation control work in an ESI environment | 50 |
| UETTDRVC29A | Control vegetation whilst performing linework  | 40 |
| UETTDRVC30A | Coordinate vegetation control operations  | 60 |
| UETTDRVC31A | Operate specialist equipment at ground level near live electrical apparatus  | 60 |
| UETTDRVC32A | Use specialised plant to cut vegetation above ground level near live electrical apparatus  | 30 |
| UETTDRVC33A | Apply pruning techniques to vegetation control near live electrical apparatus  | 50 |
| UETTDRVC34A | Undertake release and rescue from a tree near live electrical apparatus  | 20 |

SAMPLE TRAINING PROGRAMS

A range of Sample Training Plans have been provided to demonstrate the flexibility of qualifications contained in the **UET12 Electricity Supply Industry – Transmission, Distribution and Rail Sector Training Package Training Package,** but are by no means mandatory.

|  |  |
| --- | --- |
| **Occupation / Work Function** | Line worker assistant |
| **Qualification Title**  | Certificate II in ESI – Powerline Vegetation Control |
| **Qualification Code** | UET20312 |
| **Description** | Appropriate for a person working on installation and maintenance of the electricity transmission network. This includes erection of transmission towers, working with hardware used on towers and the pre-tension stringing of conductors. |
| **Notes** | For advice on how to choose electives others than those listedbelow, please refer to the UET12 ESI Transmission, Distribution and Rail Sector Training Package and its Qualifications Packaging Rules or contact the CMM Engineering Industries on (03) 9286 9880 |
| **Unit Code** | **Unit Title** | **Hours** |
| **Core** |   |   |
| UEENEEE101A | Apply Occupational Health Safety regulations, codes and practices in the workplace  | 20 |
| UETTDREL13A | Comply with sustainability, environmental and incidental response policies and procedures | 40 |
| UETTDREL14A | Working safely near live electrical apparatus as a non-electrical worker  | 40 |
| AHCARB205A | Operate and maintain chainsaws  | 40 |
| UETTDRVC23A | Plan the removal of vegetation up to vegetation exclusion zone near live electrical apparatus  | 50 |
| UETTDRVC27A | Monitor safety compliance of vegetation control work in an ESI environment | 50 |
| **Electives** |   |  |
| AHCMOM304A | Operate machinery and equipment  | 40 |
| AHCARB204A | Undertake standard climbing techniques  | 40 |
| UETTDRVC21A | Use climbing techniques to cut vegetation above ground near live electrical apparatus  | 50 |
| UETTDRVC32A | Use specialised plant to cut vegetation above ground level near live electrical apparatus  | 30 |
|  | **Total Hours** | **400** |

|  |  |
| --- | --- |
| **Occupation / Work Function** | Line worker |
| **Qualification Title**  | Certificate III in ESI — Power Systems - Transmission Overhead |
| **Qualification Code** | UET30512 |
| **Description** | Appropriate for people working as a line worker in the electricity supply industry. |
| **Notes** | For advice on how to choose electives others than those listedbelow, please refer to the UET12 ESI Transmission, Distribution and Rail Sector Training Package and its Qualifications Packaging Rules or contact the CMM Engineering Industries on (03) 9286 9880 |
| **Unit Code** | **Unit Title** | **Hours** |
| **Core** |   |   |
| CPCCLDG3001A | Licence to perform dogging  | 80 |
| CPCCLRG3001A | Licence to perform rigging basic level  | 196 |
| TLILIC2005A | License to Operate a Boom Type Elevating Work Platform (Boom Length 11 Metres or more)  | 30 |
| UEENEEE101A | Apply Occupational Health Safety regulations, codes and practices in the workplace  | 20 |
| UEENEEE102A | Fabricate, dismantle, assemble of utilities industry components  | 40 |
| UEENEEE104A | Solve problems in d.c. circuits  | 80 |
| UEENEEE105A | Fix and secure electrotechnolgy equipment  | 20 |
| UEENEEE107A | Use drawings, diagrams, schedules, standards, codes and specifications  | 40 |
| UEENEEG101A | Solve problems in electromagnetic devices and related circuits  | 60 |
| UEENEEG102A | Solve problems in low voltage a.c. circuits  | 80 |
| UETTDREL11A | Apply sustainable energy and environmental procedures  | 40 |
| UETTDREL12A | Operate plant and equipment near live electrical conductors and apparatus  | 40 |
| UETTDREL16A | Working safely near live electrical apparatus  | 20 |
| UETTDRIS54A | Install and maintain poles, structures, overhead conductors and cables  | 60 |
| UETTDRTP26A | Install transmission structures and associated hardware  | 60 |
| UETTDRTP27A | Maintain transmission structures and associated hardware  | 60 |
| UETTDRTP29A | Install and maintain transmission overhead conductors and cables  | 60 |
| UETTDRTP30A | Inspect transmission overhead structures and electrical apparatus  | 60 |
| UETTDRTP99A | Test and verify transmission overhead installations  | 40 |
| **Electives** |   |  |
| CPCCLHS3001A | Licence to operate a personnel and materials hoist  | 32 |
| CPCCLHS3002A | Licence to operate a materials hoist  | 24 |
| TLIC3003A | Drive medium rigid vehicle  | 40 |
| UETTDRDP12A | Maintain overhead energised low voltage conductors and cables | 60 |
| UETTDRIS41A | Install network infrastructure electrical equipment  | 60 |
| UETTDRIS42A | Maintain network infrastructure electrical equipment  | 60 |
|  | **Total Hours** | **1362** |

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| **Occupation / Work Function** | Power Systems - Draftsperson |
| **Qualification Title**  | Certificate IV in ESI — Network Systems |
| **Qualification Code** | UET40412 |
| **Description** | Appropriate for people working as post trade line workers, performing work associated with installation and maintenance of transmission, distribution, rail and/or cable jointing overhead and/or underground lines and cables which may be live. |
| **Notes** | For advice on how to choose electives others than those listedbelow, please refer to the UET012 ESI Transmission, Distribution and Rail Sector Training Package and its Qualifications Packaging Rules or contact the CMM Engineering Industries on (03) 9286 9880 |
| **Unit Code** | **Unit Title** | **Hours** |
| **Core** |   |   |
| CPCCLDG3001A | Licence to perform dogging  | 80 |
| TLILIC2005A | License to Operate a Boom Type Elevating Work Platform (Boom Length 11 Metres or more)  | 30 |
| UEENEEE101A | Apply Occupational Health Safety regulations, codes and practices in the workplace  | 20 |
| UEENEEE102A | Fabricate, dismantle, assemble of utilities industry components  | 40 |
| UEENEEE104A | Solve problems in d.c. circuits  | 80 |
| UEENEEE105A | Fix and secure electrotechnolgy equipment  | 20 |
| UEENEEE107A | Use drawings, diagrams, schedules, standards, codes and specifications  | 40 |
| UEENEEG101A | Solve problems in electromagnetic devices and related circuits  | 60 |
| UEENEEG102A | Solve problems in low voltage a.c. circuits  | 80 |
| UETTDREL11A | Apply sustainable energy and environmental procedures  | 40 |
| UETTDREL12A | Operate plant and equipment near live electrical conductors and apparatus  | 40 |
| UETTDREL16A | Working safely near live electrical apparatus  | 20 |
| UETTDRIS62A | Implement and monitor the power system organisational OHS policies, procedures and programs  | 60 |
| UETTDRIS63A | Implement and monitor the power system environmental and sustainable energy management policies and procedures  | 60 |
| **Electives** |   |  |
| BSBMGT403A | Implement continuous improvement  | 40 |
| AHCARB205A | Operate and maintain chainsaws  | 40 |
| UETTDRCJ22A | Install and maintain de-energised low voltage underground paper insulated cables. | 60 |
| UETTDRCJ25A | Perform straight through high voltage paper insulated to polymeric transition joint | 60 |
| UETTDRCJ26A | Install and maintain de-energised low voltage underground polymeric cables.  | 60 |
| UETTDRCJ27A | Install and maintain de-energised high voltage underground polymeric cables.  | 60 |
| UETTDRCJ28A | Joint and maintain energised low voltage underground polymeric cables  | 60 |
| UETTDRDP11A | Inspect overhead poles/structures and electrical apparatus | 60 |
| UETTDRIS59A | Conduct high potential testing of power system underground power cables  | 60 |
| UETTDRCJ29A | Install gas and oil filled specialised underground cables  | 60 |
| UETTDRCJ30A | Maintain gas and oil filled specialised underground cables | 60 |
| UETTDRDS31A | Draft and layout an power system overhead distribution extension  | 60 |
| UETTDRIS48A | Develop high voltage switching schedule  | 60 |
| UETTDRIS51A | Coordinate and direct power system switching schedules  | 60 |
| UETTDRIS64A | Install mobile Generation set for synchronised HV Genset  | 40 |
|  | **Total Hours** | **1510** |

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| **Occupation / Work Function** | Electricity Supply Technician  |
| **Qualification Title**  | Diploma of ESI — Power Systems |
| **Qualification Code** | UET50212 |
| **Description** | Appropriate for persons working as technicians in the electricity supply industry designing new transmission distribution and/or rail overhead and underground lines. Typically inside work in design/drafting facility, control room or substation. |
| **Notes** | This sample programs shows the System Operations specialisation.For advice on how to choose electives others than those listedbelow, please refer to the UET12 ESI Transmission, Distribution and Rail Sector Training Package and its Qualifications Packaging Rules or contact the CMM Engineering Industries on (03) 9286 9880 |
| **Unit Code** | **Unit Title** | **Hours** |
| **Core** |   |   |
| UEENEED104A | Use software for engineering applications  | 40 |
| UEENEEE124A | Compile and produce an electrotechnology/ utilities report  | 60 |
| UEENEEE101A | Apply Occupational Health Safety regulations, codes and practices in the workplace  | 20 |
| UEENEEE102A | Fabricate, dismantle, assemble of utilities industry components  | 40 |
| UEENEEE104A | Solve problems in d.c. circuits  | 80 |
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| UEENEEE107A | Use drawings, diagrams, schedules, standards, codes 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 |
| UETTDREL11A | Apply sustainable energy and environmental procedures  | 40 |
| UETTDREL16A | Working safely near live electrical apparatus  | 20 |
| UETTDRIS62A | Implement and monitor the power system organisational OHS policies, procedures and programs  | 60 |
| UETTDRIS63A | Implement and monitor the power system environmental and sustainable energy management policies and procedures  | 60 |
| **Electives** |   |  |
| BSBMGT502B | Manage people performance  | 70 |
| BSBMGT515A | Manage operational plan  | 60 |
| BSBINM501A | Manage an information or knowledge management system  | 50 |
| BSBINN502A | Build and sustain an innovative work environment  | 50 |
| UEENEEH102A | Repair basic electronic apparatus faults by replacement of components  | 40 |
| UETTDRDS31A | Draft and layout an power system overhead distribution extension  | 60 |
| UEENEEH139A | Troubleshoot basic amplifier circuits  | 40 |
| UEENEEI155A | Develop structured programs to control external devices  | 40 |
| UETTDRDS32A | Draft and layout an power system underground distribution extension  | 60 |
| UETTDRDS33A | Draft and layout a power system street lighting system  | 60 |
| UETTDRDS35A | Design overhead distribution power systems  | 90 |
| UETTDRDS36A | Design underground distribution power systems  | 90 |
| UETTDRDS36A | Design underground distribution power systems  | 90 |
|   | **Total Hours** | **1580** |

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| **Occupation / Work Function** | Technical Officer |
| **Qualification Title**  | Advanced Diploma of ESI — Power Systems |
| **Qualification Code** | UTE60212 |
| **Description** | Appropriate for persons working as technical officers in the electricity supply industry performing higher level managerial, design, testing and system operation functions. |
| **Notes** | This sample programs shows the System Operations specialisation.For advice on how to choose electives others than those listedbelow, please refer to the UET12 ESI Transmission, Distribution and Rail Sector Training Package and its Qualifications Packaging Rules or contact the CMM Engineering Industries on (03) 9286 9880 |
| **Unit Code** | **Unit Title** | **Hours** |
| **Core** |   |   |
| UEENEED104A | Use software for engineering applications  | 40 |
| UEENEEE124A | Compile and produce an electrotechnology/ utilities report  | 60 |
| UEENEEE083A | Establish and follow a competency development plan in an electrotechnology engineering discipline  | 20 |
| UEENEEE101A | Apply Occupational Health Safety regulations, codes and practices in the workplace  | 20 |
| UEENEEE102A | Fabricate, dismantle, assemble of utilities industry components  | 40 |
| UEENEEE104A | Solve problems in d.c. circuits  | 80 |
| UEENEEE107A | Use drawings, diagrams, schedules, standards, codes 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 |
| UETTDREL11A | Apply sustainable energy and environmental procedures  | 40 |
| UETTDREL16A | Working safely near live electrical apparatus  | 20 |
| UETTDRIS62A | Implement and monitor the power system organisational OHS policies, procedures and programs  | 60 |
| UETTDRIS63A | Implement and monitor the power system environmental and sustainable energy management policies and procedures  | 60 |
| **Electives** |   |  |
| BSBWOR501B | Manage personal work priorities and professional development  | 60 |
| BSBMGT502B | Manage people performance  | 70 |
| BSBINM501A | Manage an information or knowledge management system  | 50 |
| BSBMGT516C | Facilitate continuous improvement  | 60 |
| BSBLED501A | Develop a workplace learning environment  | 60 |
| BSBWOR502B | Ensure team effectiveness  | 60 |
| UEENEEH102A | Repair basic electronic apparatus faults by replacement of components  | 40 |
| UEENEEH139A | Troubleshoot basic amplifier circuits  | 40 |
| UETTDREL15A | Respond to power systems technical enquiries and requests  | 60 |
| UEENEED117A | Install and configure Internetworking systems  | 120 |
| UETTDRDS44A | Design power system zone substations modifications  | 105 |
| UETTDRIS69A | Diagnose and rectify faults in energy supply apparatus  | 60 |
| UETTDRIS70A | Diagnose and rectify faults in electrical energy distribution systems  | 60 |
| UETTDRIS72A | Diagnose and rectify faults in distributed Generation systems  | 60 |
| UETTDRDS48A | Analyse and appraise power system fault and outage data  | 120 |
| UETTDRIS71A | Diagnose and rectify faults in electrical energy supply transmission systems  | 60 |
| UETTDRIS73A | Develop engineering solutions for energy supply power transformer problems  | 60 |
| UETTDRSO34A | Control power systems generating plant  | 120 |
|  | **Total Hours** | **2065** |

CONTACTS AND LINKS

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| **Industry Skills Council (ISC)** |
| EE-Oz Training Standards | This ISC is responsible for developing this **UET12 Electricity Supply Industry Transmission, Distribution and Rail Sector Training Package** and can be contacted for further information. You can also source copies of the Training Package and support material. | Unit 248 Mort StreetBRADDON, ACT, 2612Phone: (02) 6262 7055Fax: (02) 6257 4222Email: ee-oz@ee-oz.com.auWeb: <http://www.ee-oz.com.au> |
| **National Register for VET in Australia** |
| Training.gov.au (TGA) | TGA is the Australian governments’ official National Register of information on Training Packages, qualifications, courses, units of competency and RTOs. | training.gov.au  |
| **Australian Government** |
| The Department of Industry, Innovation, Science, Research and Tertiary Education(DIISRTE) | DIISRTE provides a range of services and resources to assist in delivery of Training Packages. Search the DIISRTE website for links to a range of relevant resources and publications. | <http://www.innovation.gov.au>You may also find Department of Education Employment and Workplace Relations website of use.<http://www.deewr.gov.au> |
| **State Government** |
| Department of Education and Early Childhood DevelopmentHigher Education and Skills Group | Higher Education and Skills Group is responsible for funding and the implementation of Vocational Education and Training (VET) in Victoria, including Apprenticeships and Traineeships. | General information:[www.skills.vic.gov.au](http://www.skills.vic.gov.au/)Approved Training Schemes:<http://www.skills.vic.gov.au/corporate/publications/brochures-and-fact-sheets/apprenticeships-and-traineeships-in-victoria-industry-guides> |
| **Curriculum Maintenance Manager (CMM)** |
| Engineering Industries | The CMM service is provided by Executive Officers located within Victorian TAFE institutes on behalf of Skills Victoria. | George AddaBox Hill Institute of TAFE, Private Bag 2014, Box Hill,Victoria, 3128Phone: (03) 9286 9880Fax: (03) 9286 9800Email: g.adda@bhtafe.edu.auWeb: <http://trainingsupport.skills.vic.gov.au/cmminf.cfm> |
| **State VET Regulatory Authority** |
| Victorian Registration and Qualifications Authority (VRQA) | The VRQA is a statutory authority responsible for the registration of education and training providers in Victoria to ensure the delivery of quality education and training. | [www.vrqa.vic.gov.au](http://www.vrqa.vic.gov.au)Phone: 03 9637 2806 |
| **National VET Regulatory Authority** |
| Australian Skills Quality Authority (ASQA) | ASQA is the national regulator for Australia’s VET sector vocational education and training sector. ASQA regulates courses and training providers to ensure nationally approved quality standards are met. | [www.asqa.gov.au](http://www.asqa.gov.au)Info line: 1300 701 801 |
| **Industry Regulatory Body** |
| Energy Safe 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. | Level 5 Building 2 4 Riverside QuaySouthbank, VIC, 3006Postal Address:PO BOX 262Collins Street WestMelbourne, Vic 8007Phone: (03) 9203 9700Fax: (03) 9686 2197Email: info@esv.vic.gov.auWeb: <http://www.esv.vic.gov.au/> |
| **WorkSafe**  |
| WorkSafe Victoria | WorkSafe needs to provide written verification before High Risk Work Units can be added to an RTO’s scope of registration. | [www.worksafe.vic.gov.au](http://www.worksafe.vic.gov.au) Info line: 1800 136 089 |

GLOSSARY

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| **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. |
| **Nominal Hours** | The anticipated hours of supervised learning or training deemed necessary to conduct training and assessment activities associated with the program of study. These hours are determined by the Victorian State Training Authority. Nominal hours may vary for a qualification depending on the units of competency selected.  |
| **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. |