

# Victorian Purchasing Guide

UEE Electrotechnology Training Package

Release 3.0

December 2021



Victorian Purchasing Guides are provided under a Creative Commons Attribution 4.0 International licence. You are free to re-use the work under that licence, on the condition that you credit the State of Victoria (Department of Education and Training), indicate if changes were made and comply with the other licence terms, see: [Creative Commons Attribution 4.0 International](#)

The licence does not apply to:

- any images, photographs, trademarks or branding, including the Victorian Government logo and the DET logo; and
- content supplied by third parties.

Copyright queries may be directed to [copyright@education.vic.gov.au](mailto:copyright@education.vic.gov.au)

### **Disclaimer**

In compiling the information contained in and accessed through this resource, the Department of Education and Training has used its best endeavours to ensure that the information is correct and current at the time of publication but takes no responsibility for any error, omission or defect therein.

To the extent permitted by law, DET, its employees, agents and consultants exclude all liability for any loss or damage (including indirect, special or consequential loss or damage) arising from the use of, or reliance on the information contained herein, whether caused or not by any negligent act or omission. If any law prohibits the exclusion of such liability, DET limits its liability to the extent permitted by law, for the resupply of the information.

### **Third party sites**

This resource may contain links to third party websites and resources. DET is not responsible for the condition or content of these sites or resources as they are not under its control.

Third party material linked from this resource is subject to the copyright conditions of the third party. Users will need to consult the copyright notice of the third-party sites for conditions of usage.

## 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 3.0	14 December 2021	<p>This purchasing guide reflects Release 3.0 and contains:</p> <ul style="list-style-type: none"> <li>• One (1) new qualification</li> <li>• Six (6) new units of competency</li> <li>• Twenty four (24) revised qualifications</li> <li>• Ten amended units of competency</li> <li>• One deleted units of competency</li> </ul> <p>Note that in addition, MPH have been amended for;            UEE22020 Certificate II in Electrotechnology (Career Start) and            UEE31420 Certificate III in Security Equipment</p>
Release 2.0	25 May 2021	<p>This is the second release of this Training Package. Release 2.0 contains:</p> <ul style="list-style-type: none"> <li>• Seventy nine (79) qualifications</li> <li>• Thirty six (36) new units of competency</li> <li>• Four hundred and ninety four (494) revised units of competency</li> </ul>
Release 1.0	18 May 2017	<p>Initial Release of the UEE Electrotechnology Training Package            This Release incorporates 2 Units of Competency</p>

# Contents

<b>Introduction</b> .....	<b>2</b>
What is a Victorian Purchasing Guide? .....	2
Registration .....	2
Transition.....	2
<b>Qualifications</b> .....	<b>3</b>
<b>Units of Competency and Nominal Hours</b> .....	<b>7</b>
<b>Contacts and Links</b> .....	<b>34</b>
<b>Glossary</b> .....	<b>36</b>

# 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 UEE Electrotechnology Training Package Release 3.0 is provided in the Training Package Companion Volume Implementation Guide. (See [VETNet.gov.au](http://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 UEE Electrotechnology 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
UEE10120	Certificate I in ElectroComms Skills	209	220
UEE20120	Certificate II in Split Air Conditioning and Heat Pump Systems	361	380
UEE20520	Certificate II in Computer Assembly and Repair	342	360
UEE20720	Certificate II in Data and Voice Communications	427	450
UEE20920	Certificate II in Electronic Assembly	342	360
UEE21020	Certificate II in Fire Alarms Servicing	342	360
UEE21220	Certificate II in Antennae Equipment	342	360
UEE21420	Certificate II in Remote Area Power Supply Maintenance	342	360
UEE21620	Certificate II in Security Assembly and Set-up	342	360
UEE21720	Certificate II in Technical Support	342	360
UEE21920	Certificate II in Electronics	342	360
UEE22020	Certificate II in Electrotechnology (Career Start)	418	440
UEE22120	Certificate II in Sustainable Energy (Career Start)	399	420
UEE30120	Certificate III in Business Equipment	969	1020
UEE30220	Certificate III in Computer Systems Equipment	969	1020
UEE30320	Certificate III in Custom Electronics Installations	969	1020
UEE30420	Certificate III in Data and Voice Communications	1035	1090
UEE30620	Certificate III in Electrical Machine Repair	1045	1100
UEE30720	Certificate III in Switchgear and Controlgear	1073	1130

Code	Title	Minimum Payable Hours	Maximum Payable Hours
UEE30820	Certificate III in Electrotechnology Electrician	1111	1170
UEE30920	Certificate III in Electronics and Communications	969	1020
UEE31020	Certificate III in Fire Protection Control	1002	1055
UEE31220	Certificate III in Instrumentation and Control	969	1020
UEE31420	Certificate III in Security Equipment	1055	1110
UEE32020	Certificate III in Renewable Energy - ELV	969	1020
UEE32120	Certificate III in Appliance Service	1036	1090
UEE32220	Certificate III in Air Conditioning and Refrigeration	1150	1210
UEE33020	Certificate III in Electrical Fitting	1102	1160
UEE40120	Certificate IV in Computer Systems	1216	1280
UEE40220	Certificate IV in Electrical - Data and Voice Communications	475	500
UEE40320	Certificate IV in Installation Inspection and Audits	532	560
UEE40420	Certificate IV in Electrical - Instrumentation	475	500
UEE40520	Certificate IV in Electrical - Air Conditioning Split Systems	484	510
UEE40620	Certificate IV in Electrotechnology - Systems Electrician	665	700
UEE40720	Certificate IV in Electronics and Communications	1216	1280
UEE40820	Certificate IV in Electrical - Fire Protection Control Systems	475	500
UEE40920	Certificate IV in Industrial Electronics and Control	494	520
UEE41020	Certificate IV in Energy Management and Control	589	620
UEE41120	Certificate IV in Electrical - Lift Systems	437	460
UEE41220	Certificate IV in Electrical – Rail Signalling	332	350

Code	Title	Minimum Payable Hours	Maximum Payable Hours
UEE41520	Certificate IV in Video and Audio Systems	1216	1280
UEE41620	Certificate IV in Renewable Energy	1206	1270
UEE41720	Certificate IV in Rail - Communications and Network Systems	1216	1280
UEE41920	Certificate IV in Electrical - Renewable Energy	551	580
UEE42020	Certificate IV in Electrical - Photovoltaic systems	551	580
UEE42120	Certificate IV in Electrotechnology - Electrical Contracting	513	540
UEE42220	Certificate IV in Instrumentation and Control	1216	1280
UEE42620	Certificate IV in Hazardous areas - Electrical	475	500
UEE42720	Certificate IV in Air Conditioning and Refrigeration Servicing	1292	1360
UEE42820	Certificate IV in Air-conditioning Systems Energy Management and Control	1330	1400
UEE42920	Certificate IV in Refrigeration and Air Conditioning Systems	1311	1380
UEE43020	Certificate IV in Electrical Equipment and Systems	703	740
UEE43120	Certificate IV in Energy Efficiency and Assessment	627	660
UEE43220	Certificate IV in Industrial Automation and Control	1235	1300
UEE50120	Diploma of Computer Systems Engineering	1520	1600
UEE50220	Diploma of Electrical and Instrumentation	988	1040
UEE50320	Diploma of Electrical and Refrigeration and Air Conditioning	1833	1930
UEE50420	Diploma of Electrical Engineering	893	940
UEE50520	Diploma of Electronics and Communications Engineering	1520	1600
UEE50720	Diploma of Renewable Energy Engineering	855	900
UEE50920	Diploma of Industrial Electronics and Control Engineering	798	840



Code	Title	Minimum Payable Hours	Maximum Payable Hours
UEE51020	Diploma of Instrumentation and Control Engineering	1520	1600
UEE51120	Diploma of Engineering Technology - Refrigeration and Air Conditioning	1486	1564
UEE51220	Diploma of Air Conditioning and Refrigeration Engineering	1596	1680
UEE53020	Diploma of Electrical Systems Engineering	893	940
UEE60220	Advanced Diploma of Electronics and Communications Engineering	2052	2160
UEE60420	Advanced Diploma of Computer Systems Engineering	2090	2200
UEE60620	Advanced Diploma of Industrial Electronics and Control Engineering	1216	1280
UEE60920	Advanced Diploma of Renewable Energy Engineering	1330	1400
UEE61220	Advanced Diploma of Engineering - Explosion protection	1159	1220
UEE61521	Advanced Diploma of Instrumentation and Control Engineering	1957	2060
UEE61720	Advanced Diploma of Engineering Technology - Electronics	2014	2120
UEE61820	Advanced Diploma of Engineering Technology - Computer Systems	2014	2120
UEE62020	Advanced Diploma of Engineering Technology - Renewable Energy	2071	2180
UEE62120	Advanced Diploma of Engineering Technology - Electrical	2061	2170
UEE62220	Advanced Diploma of Electrical - Engineering	1349	1420
UEE62320	Advanced Diploma of Electrical Engineering - Coal Mining	1197	1260
UEE62420	Advanced Diploma of Engineering Technology - Air Conditioning and Refrigeration	1985	2090
UEE62520	Advanced Diploma of Air Conditioning and Refrigeration Engineering	2052	2160
UEE63020	Advanced Diploma of Electrical Systems Engineering	1425	1500

# Units of Competency and Nominal Hours

Unit Code	Unit Title	Nominal Hours
UEEAS0001	Assemble electronic components	40
UEEAS0002	Conduct quality and functional tests on assembled electronic apparatus	20
UEEAS0003	Modify electronic sub-assemblies	40
UEEAS0004	Select electronic components for assembly	20
UEEAS0005	Set up and check electronic component assembly machines	40
UEEAS0006	Use lead-free soldering techniques	40
UEEAS0007	Assemble, mount and connect control gear and switchgear	120
UEEAS0008	Fabricate and assemble bus bars	60
UEEAS0009	Mount and wire control panel equipment	60
UEECD0001	Analyse materials for suitability in electrical equipment	80
UEECD0002	Analyse static and dynamic parameters of electrical equipment	80
UEECD0003	Apply industry and community standards to engineering activities	20
UEECD0004	Apply material science to solving electrotechnology engineering problems	60
UEECD0005	Apply physics to solving electrotechnology engineering problems	60
UEECD0006	Apply technologies and concepts to energy sector work activities	120
UEECD0007	Apply work health and safety regulations, codes and practices in the workplace	20
UEECD0008	Carry out preparatory energy sector work activities	60
UEECD0009	Carry out routine work activities in an energy sector environment	40
UEECD0010	Compile and produce an energy sector detailed report	60
UEECD0011	Comply with scheduled and preventative maintenance program processes	20

Unit Code	Unit Title	Nominal Hours
UEECD0012	Contribute to risk management in electrotechnology systems	20
UEECD0013	Develop and implement energy sector maintenance programs	60
UEECD0014	Develop design briefs for electrotechnology projects	40
UEECD0015	Develop engineering solutions to photonic system problems	80
UEECD0016	Document and apply measures to control WHS risks associated with electrotechnology work	20
UEECD0017	Establish and follow a competency development plan in an electrotechnology engineering discipline	20
UEECD0018	Establish, maintain and evaluate energy sector WHS/OHS systems	60
UEECD0019	Fabricate, assemble and dismantle utilities industry components	40
UEECD0020	Fix and secure electrotechnology equipment	20
UEECD0021	Identify and select components, accessories and materials for energy sector work activities	20
UEECD0022	Identify building techniques, methods and materials used in energy sector work activities	60
UEECD0023	Identify effects of energy on machinery and materials in an energy sector environment	120
UEECD0024	Implement and monitor energy sector WHS policies and procedures	20
UEECD0025	Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits	40
UEECD0026	Manage risk in electrotechnology activities	60
UEECD0027	Participate in development and follow a personal competency development plan	20
UEECD0028	Plan an integrated cabling installation system	40
UEECD0029	Plan electrotechnology projects	60
UEECD0030	Prepare electrotechnology/utilities drawings using manual drafting and CAD equipment and software	60
UEECD0031	Prepare engineering drawings using manual drafting and CAD for electrotechnology applications	60

Unit Code	Unit Title	Nominal Hours
UEECD0032	Produce detailed electrotechnology/utilities drawings using CAD equipment and software	60
UEECD0033	Produce products for carrying out energy sector work activities	80
UEECD0034	Produce routine tools/devices for carrying out energy sector work activities	120
UEECD0035	Provide basic instruction in the use of electrotechnology apparatus	20
UEECD0036	Provide engineering solutions for problems in complex multiple path circuits	60
UEECD0037	Provide engineering solutions for uses of materials and thermodynamic effects	100
UEECD0038	Provide solutions and report on routine electrotechnology problems	60
UEECD0039	Provide solutions to basic engineering computational problems	60
UEECD0040	Solve basic problems electronic and digital equipment and circuits	80
UEECD0041	Solve electrotechnical engineering problems	60
UEECD0042	Solve problems in ELV single path circuits	40
UEECD0043	Solve problems in direct current circuits	80
UEECD0044	Solve problems in multiple path circuits	40
UEECD0045	Solve problems in multiple path extra-low voltage (ELV) a.c. circuits	40
UEECD0046	Solve problems in single path circuits	40
UEECD0047	Supervise and coordinate energy sector work activities	40
UEECD0048	Undertake computations in an energy sector environment	120
UEECD0049	Use advanced computational processes to provide solutions to energy sector engineering problems	120
UEECD0050	Use and maintain the integrity of a portable gas detection device	20
UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications	40

Unit Code	Unit Title	Nominal Hours
UEECD0052	Use routine equipment/plant/technologies in an energy sector environment	60
UEECD0053	Write specifications for computer systems engineering projects	40
UEECD0054	Write specifications for electronics and communications engineering projects	40
UEECD0055	Write specifications for industrial electronics and control projects	40
UEECD0056	Apply methods to maintain currency of industry developments	20
UEECD0057	Manage electrotechnology projects	40
UEECD0058	Observe safety practices are followed in the vicinity of isolated electrical cables	20
UEECD0059	Write specifications for electrical engineering projects	40
UEECD0060	Write specifications for electrotechnology engineering projects	40
UEECD0061	Write specifications for refrigeration and air conditioning engineering projects	40
UEECD0062	Write specifications for renewable energy engineering projects	40
UEECD0063	Write work activity reports	20
UEECO0001	Estimate electrotechnology projects	40
UEECO0002	Maintain documentation	20
UEECO0003	Manage contract variations	40
UEECO0004	Participate in appliance servicing work and competency development activities	20
UEECO0005	Participate in business equipment work and competency development activities	20
UEECO0006	Participate in computer equipment work and competency development activities	20
UEECO0007	Participate in electronics and communications work and competency development activities	20
UEECO0008	Participate in fire protection control work and competency development activities	20

Unit Code	Unit Title	Nominal Hours
UEECO0009	Participate in instrumentation and control work and competency development activities	20
UEECO0010	Participate in refrigeration and air conditioning work and competency development activities	20
UEECO0011	Participate in security equipment work and competency development activities	20
UEECO0012	Participate in voice and data communications work and competency development activities	20
UEECO0013	Prepare specifications for the supply of materials and equipment for electrotechnology projects	40
UEECO0014	Prepare tender submissions for electrotechnology projects	60
UEECO0015	Provide quotations for installation or service jobs	20
UEECO0016	Receive and store materials and equipment for electrotechnology work	20
UEECO0017	Source and purchase material/parts for installation or service jobs	20
UEECO0018	Contribute to the commercialisation of products / applications / services	80
UEECO0019	Contribute to the conduct of a research project	80
UEECO0020	Contribute to the development of a product / application / service	80
UEECO0021	Contribute to the planning of a research project	80
UEECO0022	Participate in electrical machine repair work and competency development activities	20
UEECO0023	Participate in electrical work and competency development activities	20
UEECO0024	Participate in switchgear and control gear work and competency development activities	20
UEECO0025	Provide quotations for inspection and compliance audit services	40
UEECS0001	Administer computer networks	80
UEECS0002	Analyse and implement biometric measuring techniques and applications	120
UEECS0003	Assemble, set up and test computing devices	80

Unit Code	Unit Title	Nominal Hours
UEECS0004	Commission industrial computer systems	20
UEECS0005	Design and implement advanced routing for internetworking systems	100
UEECS0006	Design and implement multi-layer switching for internetworking systems	100
UEECS0007	Design and implement network systems for internetworking	120
UEECS0008	Design and implement remote access for internetworking systems	100
UEECS0009	Design and implement security for internetworking systems	100
UEECS0010	Design and implement wireless LANs/WANs for internetworking systems	100
UEECS0011	Design and manage enterprise computer networks	80
UEECS0012	Design embedded controller control systems	80
UEECS0013	Develop and validate biometric equipment/systems installation	120
UEECS0014	Develop computer network services	120
UEECS0015	Develop energy sector computer network applications infrastructure	80
UEECS0016	Develop energy sector directory services	80
UEECS0017	Develop industrial control programs for microcomputer equipped devices	60
UEECS0018	Develop web pages for engineering applications	40
UEECS0019	Develop, implement and test object-oriented code	140
UEECS0020	Evaluate and modify object-oriented code programs	40
UEECS0021	Install and administer UNIX/LINUX-based networked computers	80
UEECS0022	Install and configure a client computer operating system and software	40
UEECS0023	Install and configure network systems for internetworking	120
UEECS0024	Integrate multiple computer operating systems on a client server local area network	80

Unit Code	Unit Title	Nominal Hours
UEECS0025	Modify/redesign industrial computer systems	20
UEECS0026	Plan industrial computer systems projects	60
UEECS0027	Provide programming solution for computer systems engineering problems	60
UEECS0028	Select, install, configure and test multimedia components	40
UEECS0029	Set up and configure basic local area network (LAN)	40
UEECS0030	Set up, configure and test biometric devices	40
UEECS0031	Set up, create and implement content for a web server	120
UEECS0032	Support computer hardware and software for engineering applications	120
UEECS0033	Use engineering applications software on personal computers	40
UEEDV0001	Assemble and connect telecommunication frames and cabinets	60
UEEDV0002	Install aerial telecommunication cables	40
UEEDV0003	Install and connect cabling for direct access to telecommunications service	20
UEEDV0004	Install and connect data and voice communication equipment	60
UEEDV0005	Install and maintain cabling for multiple access to telecommunication services	120
UEEDV0006	Install and modify optical fibre performance data communication cabling	40
UEEDV0007	Install underground communication cables	40
UEEDV0008	Install, modify and verify coaxial and structured communication copper cabling	40
UEEDV0009	Select and arrange data and voice equipment for local area networks	80
UEEDV0010	Select and arrange equipment for wireless communication networks	60
UEEDV0011	Set up and configure basic data communication systems	40



Unit Code	Unit Title	Nominal Hours
UEEDV0012	Set up and configure the wireless capabilities of communications and data storage devices	40
UEEDV0013	Solve problems in voice and data communications circuits	40
UEEDV0014	Test, report and rectify faults in data and voice installations	60
UEEEEC0001	Analyse the performance of wireless-based electronic communication systems	40
UEEEEC0002	Assemble and install reception antennae and signal distribution equipment	60
UEEEEC0003	Assemble and set up basic security systems	80
UEEEEC0004	Assemble and set up fixed video/audio components and systems in buildings and premises	120
UEEEEC0005	Assess electronic apparatus compliance	60
UEEEEC0006	Carry out repairs of predictable faults in video and audio replay/recording apparatus	120
UEEEEC0007	Commission electronics and communications systems	20
UEEEEC0008	Commission large fire protection systems	40
UEEEEC0009	Commission satellite and microwave communication systems	40
UEEEEC0010	Design and develop advanced digital systems	40
UEEEEC0011	Design and develop electronics/computer systems projects	40
UEEEEC0012	Design custom electronic equipment installations	120
UEEEEC0013	Design electronic printed circuit boards	40
UEEEEC0014	Design signal-conditioning sub-systems	80
UEEEEC0015	Develop basic plans for integrating security systems	40
UEEEEC0016	Develop engineering solutions to RF amplifier problems	40
UEEEEC0017	Develop engineering solutions to analogue electronic problems	80
UEEEEC0018	Develop engineering solutions to audio electronic problems	60

Unit Code	Unit Title	Nominal Hours
UEEEEC0019	Develop software solutions for microcontroller-based systems	60
UEEEEC0020	Develop solutions for air surveillance apparatus and systems	120
UEEEEC0021	Diagnose and rectify faults in air navigation circuits and systems	120
UEEEEC0022	Diagnose and rectify faults in camera circuits and equipment	60
UEEEEC0023	Diagnose and rectify faults in digital transmission circuits and systems	80
UEEEEC0024	Diagnose and rectify faults in electronic display circuits	60
UEEEEC0025	Diagnose and rectify faults in recording and replay equipment	60
UEEEEC0026	Enter and verify programs for fire protection systems	40
UEEEEC0027	Enter instructions and test wired and wireless security systems	40
UEEEEC0028	Fault find and repair complex power supplies	40
UEEEEC0029	Fault find and repair electronic apparatus	40
UEEEEC0030	Fault find and repair electronic medical equipment	120
UEEEEC0031	Fault find and repair global positioning systems	60
UEEEEC0032	Fault find and repair high-volume office equipment	120
UEEEEC0033	Fault find and repair navigation systems	60
UEEEEC0034	Fault find and repair radar apparatus and systems	120
UEEEEC0035	Fault find and repair satellite-based surveillance and observation systems	60
UEEEEC0036	Fault find and repair sonar apparatus and systems	120
UEEEEC0037	Fault find and repair telecommunication apparatus and systems	60
UEEEEC0038	Find and repair microwave amplifier section faults in electronic apparatus	40
UEEEEC0039	Install and test microwave antennae and waveguides	60

Unit Code	Unit Title	Nominal Hours
UEEEEC0040	Install commercial video/audio system components	120
UEEEEC0041	Install fire detection and warning system apparatus	40
UEEEEC0042	Install large security systems	100
UEEEEC0043	Manage computer systems/electronics projects	40
UEEEEC0044	Modify - redesign electronics and communications systems	20
UEEEEC0045	Modify digital signal processing (DSP) based sub-systems	80
UEEEEC0046	Operate and maintain amateur radio communication stations	40
UEEEEC0047	Plan large electronic projects	60
UEEEEC0048	Program and commission commercial access control security systems	60
UEEEEC0049	Program and commission commercial security closed-circuit television systems	60
UEEEEC0050	Program and commission commercial security systems	60
UEEEEC0051	Program and commission commercial video/audio systems	40
UEEEEC0052	Program and test large security systems	120
UEEEEC0053	Provide engineering solutions to air traffic control system problems	40
UEEEEC0054	Provide gate array solutions for complex electronics systems	60
UEEEEC0055	Repair basic computer equipment faults by replacement of modules/sub-assemblies	40
UEEEEC0056	Repair predictable faults in audio components	40
UEEEEC0057	Repair predictable faults in general electronic apparatus	40
UEEEEC0058	Repair predictable faults in television receivers	120
UEEEEC0059	Repair routine business equipment faults	120
UEEEEC0060	Repairs basic electronic apparatus faults by replacement of components	40

Unit Code	Unit Title	Nominal Hours
UEEEEC0061	Set up and adjust commercial radio frequency (RF) transmission and reception systems	60
UEEEEC0062	Set up and test residential video/audio equipment	40
UEEEEC0063	Solve fundamental electronic communications system problems	40
UEEEEC0064	Solve oscillator problems	40
UEEEEC0065	Solve problems in basic electronic circuits	100
UEEEEC0066	Troubleshoot amplifiers in an electronic apparatus	80
UEEEEC0067	Troubleshoot basic amplifier circuits	40
UEEEEC0068	Troubleshoot communication systems	80
UEEEEC0069	Troubleshoot digital sub-systems	80
UEEEEC0070	Troubleshoot faults in television receivers	120
UEEEEC0071	Troubleshoot fire protection systems	40
UEEEEC0072	Troubleshoot microcontroller-based hardware systems	40
UEEEEC0073	Troubleshoot professional audio reproduction components	120
UEEEEC0074	Troubleshoot resonance circuits in an electronic apparatus	80
UEEEEC0075	Troubleshoot single phase input d.c power supplies	40
UEEEEC0076	Verify compliance and functionality of fire protection system installations	60
UEEEEC0077	Verify functionality and compliance of custom electronic installations	40
UEEEL0001	Apply compliance requirements to all aspects of electrical work	20
UEEEL0002	Apply currency of safe working practices and compliance verification of electrical installations	20
UEEEL0003	Arrange circuits, control and protection for electrical installations	40
UEEEL0004	Carry out basic repairs to electrical components and equipment	40

Unit Code	Unit Title	Nominal Hours
UEEEL0005	Develop and connect electrical control circuits	80
UEEEL0006	Develop detailed and complex drawings for electrical systems using CAD systems	80
UEEEL0007	Develop detailed electrical drawings	60
UEEEL0008	Evaluate and modify low voltage heating equipment and controls	20
UEEEL0009	Evaluate and modify low voltage lighting circuits, equipment and controls	20
UEEEL0010	Evaluate and modify low voltage socket outlets circuits	20
UEEEL0011	Evaluate performance of low voltage electrical apparatus	40
UEEEL0012	Install low voltage wiring, appliances, switchgear and associated accessories	40
UEEEL0013	Install, set up and commission interval metering	20
UEEEL0014	Isolate, test and troubleshoot low voltage electrical circuits	80
UEEEL0015	Manage large electrical projects	40
UEEEL0016	Provide advice on effective and energy efficient lighting products	40
UEEEL0017	Repair and maintain mechanical components of electrical machines	60
UEEEL0018	Select wiring systems and select cables for low voltage electrical installations	80
UEEEL0019	Solve problems in direct current (d.c.) machines	30
UEEEL0020	Solve problems in low voltage (a.c.) circuits	80
UEEEL0021	Solve problems in magnetic and electromagnetic devices	30
UEEEL0022	Supply effective and efficient lighting products for domestic and small commercial applications	20
UEEEL0023	Terminate cables, cords and accessories for low voltage circuits	40
UEEEL0024	Test and connect alternating current (a.c.) rotating machines	40
UEEEL0025	Test and connect transformers	40

Unit Code	Unit Title	Nominal Hours
UEEEL0026	Align and install traction lift equipment	40
UEEEL0027	Carry out low voltage electrical field testing and report findings	60
UEEEL0028	Conduct compliance and functional verification of electrical apparatus and existing circuits	40
UEEEL0029	Conduct compliance inspection of LV electrical installations with demand exceeding 100 A per phase	40
UEEEL0030	Conduct compliance inspection of single phase LV electrical installations	60
UEEEL0031	Conduct compliance inspection of special LV electrical installations	60
UEEEL0032	Conduct electrical tests on HV electrical machines	60
UEEEL0033	Conduct electrical tests on LV electrical machines	40
UEEEL0034	Conduct mechanical tests on electrical machines and components	40
UEEEL0035	Design effective and efficient lighting for public, open and sports areas	60
UEEEL0036	Design effective and efficient lighting for residential and commercial buildings	60
UEEEL0037	Design electrical installations with a low voltage demand greater than 400 A per phase	40
UEEEL0038	Design switchboards rated for high fault levels (greater than 400 A)	60
UEEEL0039	Design, install and verify compliance and functionality of general electrical installations	60
UEEEL0040	Develop compliance policies and plans to conduct an electrical contracting business	80
UEEEL0041	Develop engineering solution for synchronous machine and control problems	60
UEEEL0042	Develop engineering solutions for d.c. machine and control problems	60
UEEEL0043	Develop engineering solutions for induction machine and control problems	60
UEEEL0044	Diagnose and rectify faults in complex lift systems	40
UEEEL0045	Diagnose and rectify faults in traction lift systems	80

Unit Code	Unit Title	Nominal Hours
UEEEL0046	Find and repair faults in LV d.c. electrical apparatus and circuits	60
UEEEL0047	Identify, shut down and restart systems with alternate supplies	20
UEEEL0049	Install and maintain emergency safety systems	60
UEEEL0050	Install and replace low voltage current transformer metering	20
UEEEL0051	Investigate and report on electrical incidents and causes	60
UEEEL0052	Maintain and service traction lift systems and equipment	40
UEEEL0053	Maintain operation of electrical marine equipment and systems	60
UEEEL0054	Maintain operation of electrical mining equipment and systems	60
UEEEL0055	Overhaul and repair major switchgear and control gear	60
UEEEL0056	Place and connect electrical coils	40
UEEEL0057	Plan electrical installations with a low voltage demand up to 400 A per phase	40
UEEEL0058	Plan large electrical projects	60
UEEEL0059	Plan low voltage switchboard and control panel layouts	40
UEEEL0060	Prepare quotations for the supply of effective and efficient lighting products for lighting projects	40
UEEEL0061	Provide advice on the application of energy efficient lighting for ambient and aesthetic effect	20
UEEEL0062	Provide engineering solutions to problems in complex polyphase power circuits	60
UEEEL0063	Provide photometric data for illumination system design	80
UEEEL0064	Rewind HV three phase induction machines rated for voltages above 3.3 kV	60
UEEEL0065	Rewind HV three phase induction machines rated for voltages to 3.3 kV	60
UEEEL0066	Rewind LV direct current machines	120

Unit Code	Unit Title	Nominal Hours
UEEEL0067	Rewind single phase machines	120
UEEEL0068	Rewind three phase low voltage induction machines	120
UEEEL0069	Select and arrange equipment for special LV electrical installations	60
UEEEL0070	Select effective and efficient light sources and luminaries for given locations and designs	60
UEEEL0071	Select low voltage power factor correction equipment	40
UEEEL0072	Set up and place LV electrical apparatus and associated circuits into service	40
UEEEL0073	Verify compliance and functionality of special LV electrical installations	40
UEEEL0074	Wind electrical coils	40
UEEEL0075	Inspect, test and maintain emergency alarm systems and equipment	20
UEEEL0076	Inspect, test and maintain emergency lighting systems	30
UEEHA0001	Conduct detailed inspection of electrical installations for hazardous areas	40
UEEHA0002	Conduct visual and close inspection of electrical installations for hazardous areas	40
UEEHA0003	Determine the explosion-protection requirements to meet a specified classified hazardous area	40
UEEHA0004	Enter a classified hazardous area to undertake work related to electrical equipment	20
UEEHA0005	Install explosion-protected equipment and associated apparatus and wiring systems	60
UEEHA0006	Maintain equipment associated with hazardous areas	60
UEEHA0007	Plan electrical installations for hazardous areas	20
UEEHA0008	Design gas detection systems	20
UEEHA0009	Develop and manage periodic electrical inspection and maintenance programs for hazardous areas	20
UEEHA0010	Supervise repair and overhaul of explosion-protected equipment type Group III ('t')	60



Unit Code	Unit Title	Nominal Hours
UEEHA0011	Supervise repair and overhaul of explosion-protected equipment type flameproof (Ex d)	60
UEEHA0012	Supervise repair and overhaul of explosion-protected equipment type increased safety (Ex e)	60
UEEHA0013	Supervise repair and overhaul of explosion-protected equipment type intrinsically safe (Ex i)	60
UEEHA0014	Supervise repair and overhaul of explosion-protected equipment type pressurised (Ex p)	60
UEEHA0015	Supervise repair and overhaul of explosion-protected rotating machines	60
UEEIC0001	Analyse complex electronic circuits controlling fluids	80
UEEIC0002	Assemble, enter and verify operating instructions in microprocessor equipped devices	20
UEEIC0003	Assist in commissioning process and instrumentation control systems	40
UEEIC0004	Calibrate, adjust and test measuring instruments	40
UEEIC0005	Configure and maintain industrial control system networks	60
UEEIC0006	Design and configure human-machine interface (HMI) networks	60
UEEIC0007	Design and use advanced programming tools, PC networks and HMI Interfacing	120
UEEIC0008	Design electronic control systems	60
UEEIC0009	Develop an electrical integrated system interface for access through a touch screen	20
UEEIC0010	Develop and test code for microcontroller devices	60
UEEIC0011	Develop electrical integrated systems	20
UEEIC0012	Develop structured programs to control external devices	40
UEEIC0013	Develop, enter and verify discrete control programs for programmable controllers	60
UEEIC0014	Develop, enter and verify programs in supervisory control and data acquisition systems	60

Unit Code	Unit Title	Nominal Hours
UEEIC0015	Develop, enter and verify word and analogue control programs for programmable logic controllers	60
UEEIC0016	Diagnose and rectify faults in a.c. motor drive systems	60
UEEIC0017	Diagnose and rectify faults in d.c. motor drive systems	60
UEEIC0018	Diagnose and rectify faults in digital controls systems	60
UEEIC0019	Diagnose and rectify faults in servo drive systems	60
UEEIC0020	Fault find and repair analogue circuits and components in electronic control systems	60
UEEIC0021	Find and rectify faults in process final control elements	40
UEEIC0022	Install instrumentation and control apparatus and associated equipment	20
UEEIC0023	Install instrumentation and control cabling and tubing	20
UEEIC0024	Plan the electrical installation of integrated systems	20
UEEIC0025	Provide solutions to extra-low voltage (ELV) electro-pneumatic control systems and drives	60
UEEIC0026	Provide solutions to fluid circuit operations	60
UEEIC0027	Provide solutions to pneumatic-hydraulic system operations	80
UEEIC0028	Provide solutions to problems in industrial control systems	60
UEEIC0029	Set up and adjust PID control loops	40
UEEIC0030	Set up and adjust advanced PID process control loops	40
UEEIC0031	Set up and configure human-machine interface (HMI) and industrial networks	60
UEEIC0032	Set up electronically controlled robotically operated complex systems	80
UEEIC0033	Set up gas analysis measuring and control instruments	20
UEEIC0034	Set up industrial field control devices	60
UEEIC0035	Set up scientific analysis measuring and control instruments	20

Unit Code	Unit Title	Nominal Hours
UEEIC0036	Set up water analysis measuring and control instruments	20
UEEIC0037	Set up weighting measuring and control instruments	20
UEEIC0038	Solve problems in density/level measurement components and systems	40
UEEIC0039	Solve problems in flow measurement components and systems	40
UEEIC0040	Solve problems in polyphase electronic power control circuits	60
UEEIC0041	Solve problems in pressure measurement components and systems	40
UEEIC0042	Solve problems in single phase electronic power control circuits	60
UEEIC0043	Solve problems in temperature measurement components and systems	40
UEEIC0044	Troubleshoot measuring and analysis systems	40
UEEIC0045	Troubleshoot medical equipment control systems	120
UEEIC0046	Troubleshoot process control systems	60
UEEIC0047	Use instrumentation drawings, specifications, standards and equipment manuals	40
UEEIC0048	Verify compliance and functionality of instrumentation and control installations	40
UEEIC0049	Manage instrumentation and control projects	40
UEEIC0050	Plan instrumentation and control projects	60
UEERA0001	Analyse the operation of HVAC air and hydronic systems	80
UEERA0002	Analyse the psychometric performance of HVAC/R systems	50
UEERA0003	Analyse the thermodynamic performance of HVAC/R systems	40
UEERA0004	Analyse vibration and noise in refrigeration and air conditioning systems	80
UEERA0005	Apply safety awareness and legal requirements for ammonia refrigerant	10

Unit Code	Unit Title	Nominal Hours
UEERA0006	Apply safety awareness and legal requirements for carbon dioxide refrigerant	10
UEERA0007	Apply safety awareness and legal requirements for flammable refrigerants	10
UEERA0008	Audit HVAC/R control systems for compliance with regulations and standards	60
UEERA0009	Audit energy use for commercial HVAC/R systems	40
UEERA0010	Commission complex heating, ventilation and air conditioning (HVAC) systems	80
UEERA0011	Commission complex refrigeration systems and equipment	80
UEERA0012	Commission complex refrigeration/air conditioning control systems	80
UEERA0013	Commission refrigeration/air conditioning hydronic systems	80
UEERA0014	Design ammonia refrigerated systems	40
UEERA0015	Design carbon dioxide refrigerated systems	40
UEERA0016	Design commercial refrigeration systems and select components	80
UEERA0017	Design complex air conditioning systems and select equipment	120
UEERA0018	Design complex commercial refrigeration systems and select equipment	40
UEERA0019	Design complex control systems for refrigeration or heating, ventilation, air conditioning systems	80
UEERA0020	Design complex industrial refrigeration systems and select equipment	40
UEERA0021	Design control systems for refrigeration or heating, ventilation and air conditioning systems	80
UEERA0022	Design heating, ventilation and air conditioning (HVAC) systems and select components	60
UEERA0023	Design hydrocarbon refrigerated systems	40
UEERA0024	Design hydronic systems and select equipment	80
UEERA0025	Design industrial refrigeration systems and select components	80

Unit Code	Unit Title	Nominal Hours
UEERA0026	Design mechanical ventilation/exhaust systems and select equipment	40
UEERA0027	Design secondary refrigerant systems	40
UEERA0028	Determine noise and vibration encountered in HVAC/R applications	40
UEERA0029	Develop heat exchanger design specifications	80
UEERA0030	Develop specifications and prepare drawings for HVAC/R projects	60
UEERA0031	Diagnose and rectify faults in air conditioning and refrigeration control systems	80
UEERA0032	Diagnose and rectify faults in complex air conditioning/refrigeration systems	100
UEERA0033	Diagnose faults in complex HVAC/refrigeration control systems	80
UEERA0034	Establish heat loads for commercial refrigeration and/or air conditioning applications	80
UEERA0035	Establish the basic operating conditions of air conditioning systems	20
UEERA0036	Establish the basic operating conditions of vapour compression systems	60
UEERA0037	Establish the basic operating conditions of vapour compression systems - appliances	50
UEERA0038	Establish the thermodynamic parameters of refrigeration and air conditioning systems	80
UEERA0039	Evaluate and report on building services energy management systems	80
UEERA0040	Evaluate and report on the indoor air quality of buildings	40
UEERA0041	Evaluate new and alternative technologies applicable to electrotechnology applications	40
UEERA0042	Evaluate thermodynamic and fluid parameters of refrigeration systems	100
UEERA0043	Find and rectify faults in appliance control systems and devices	60
UEERA0044	Find and rectify faults in single phase motors and associated controls	40

Unit Code	Unit Title	Nominal Hours
UEERA0045	Find and rectify faults in three phase motors and associated controls	30
UEERA0046	Install and commission ammonia refrigeration systems, components and associated equipment	20
UEERA0047	Install and commission carbon dioxide refrigeration systems, components and associated equipment	20
UEERA0048	Install and commission flammable refrigerant air conditioning and refrigeration systems	20
UEERA0049	Install and start up single head split air conditioning and water heating heat pump systems	70
UEERA0050	Install refrigerant pipe work, flow controls and accessories	60
UEERA0051	Install, commission, service and maintain air conditioning systems	80
UEERA0052	Install, commission, service and maintain low temperature systems	40
UEERA0053	Install, commission, service and maintain medium temperature systems	40
UEERA0054	Maintain microbial control of refrigeration and air conditioning systems	20
UEERA0055	Manage refrigeration and air conditioning projects	40
UEERA0056	Monitor and adjust refrigeration energy management systems	40
UEERA0057	Operate ammonia refrigeration plant	40
UEERA0058	Plan refrigeration and air conditioning projects	60
UEERA0059	Prepare and connect refrigerant tubing and fittings	40
UEERA0060	Produce HVAC/R control system diagrams	40
UEERA0061	Produce HVAC/R system design drawings	80
UEERA0062	Recover and charge refrigerants	40
UEERA0063	Recover, pressure test, evacuate, charge and leak test refrigerants - appliances	50
UEERA0064	Recover, pressure test, evacuate, charge and leak test refrigerants - split systems	60

Unit Code	Unit Title	Nominal Hours
UEERA0065	Repair and service ammonia refrigeration systems	20
UEERA0066	Repair and service carbon dioxide refrigeration systems	20
UEERA0067	Repair and service secondary refrigeration systems	20
UEERA0068	Repair and service self-contained carbon dioxide refrigeration and heat pump systems	20
UEERA0069	Resolve problems in beverage dispensers	40
UEERA0070	Resolve problems in central plant air conditioning systems	40
UEERA0071	Resolve problems in dairy refrigeration systems	20
UEERA0072	Resolve problems in hydronic systems	40
UEERA0073	Resolve problems in ice making systems	20
UEERA0074	Resolve problems in industrial refrigeration systems	20
UEERA0075	Resolve problems in post-mix refrigeration systems	20
UEERA0076	Resolve problems in refrigerated beverage vending cabinets	20
UEERA0077	Resolve problems in transport refrigeration systems	20
UEERA0078	Resolve problems in ultra-low temperature refrigeration systems	20
UEERA0079	Safely handle refrigerants and lubricants	40
UEERA0080	Select basic commercial refrigeration system equipment, components and accessories	40
UEERA0081	Select refrigerant piping, accessories and associated controls	60
UEERA0082	Select residential air conditioning system equipment, components and accessories	40
UEERA0083	Service and repair microwave ovens	40
UEERA0084	Service and repair self-contained flammable refrigerants air conditioning and refrigeration systems	20
UEERA0085	Service clothes washing machines and dryers	40

Unit Code	Unit Title	Nominal Hours
UEERA0086	Service dishwasher machines	40
UEERA0087	Service electrical heating appliances	60
UEERA0088	Service gas heating appliances	40
UEERA0089	Service refrigeration appliances	60
UEERA0090	Service room air conditioners	30
UEERA0091	Service small electrical appliances and power tools	60
UEERA0092	Solve problems in low voltage refrigeration and air conditioning circuits	60
UEERA0093	Verify functionality and compliance of appliances	20
UEERA0094	Verify functionality and compliance of refrigeration and air conditioning installations	40
UEERA0095	Recover refrigerant from stationary self-contained end of life decommissioned equipment	20
UEERA0096	Inspect, test and repair fire and smoke control features of mechanical services systems	30
UEERA0097	Install, commission, service and maintain variable refrigerant flow air conditioning systems	40
UEERE0001	Apply environmentally and sustainable procedures in the energy sector	20
UEERE0002	Assemble and connect remote area power supplies	60
UEERE0003	Assess energy loads and uses for energy efficiency in commercial facilities	40
UEERE0004	Assess energy loads and uses for energy efficiency in industrial properties and enterprises	40
UEERE0005	Assess energy loads and uses for energy efficiency in residential, office and retail premises	40
UEERE0006	Conduct periodic maintenance of remote area power supply battery banks	40
UEERE0007	Conduct periodic maintenance of remote area power supply generator sets	40



Unit Code	Unit Title	Nominal Hours
UEERE0008	Conduct periodic maintenance of remote area power supply photovoltaic arrays	40
UEERE0009	Conduct periodic maintenance of remote area power supply wind generators	40
UEERE0010	Design energy management controls for electrical installations in buildings	80
UEERE0011	Design grid-connected photovoltaic power supply systems	60
UEERE0012	Develop effective engineering strategies for energy reduction in buildings	100
UEERE0013	Develop strategies to address environmental and sustainability issues in the energy sector	20
UEERE0014	Develop strategies to address sustainability issues for electrical installations	20
UEERE0015	Implement and monitor energy sector environmental and sustainable policies and procedures	20
UEERE0016	Install, configure and commission LV grid-connected photovoltaic power systems	80
UEERE0017	Maintain and repair facilities associated with remote area essential service operations	120
UEERE0018	Maintain and repair remote area power generation facilities	80
UEERE0019	Maintain safety and tidiness of remote area power supply systems	20
UEERE0020	Promote sustainable energy practices in the community	60
UEERE0021	Provide basic sustainable energy solutions for energy reduction in residential premises	40
UEERE0022	Solve basic problems in photovoltaic energy apparatus and systems	40
UEERE0023	Work safely with remote area power supply systems	20
UEERE0024	Attend to breakdown in remote area power supplies (RAPS)	20
UEERE0025	Carry out basic repairs to renewable energy (RE) apparatus	80
UEERE0026	Conduct checks in the demand side use of remote area power supplies (RAPS)	40

Unit Code	Unit Title	Nominal Hours
UEERE0027	Coordinate maintenance of renewable energy (RE) apparatus and systems	20
UEERE0028	Design hybrid renewable power systems	80
UEERE0029	Design micro-hydro systems rated to 6.4 kW	60
UEERE0030	Design renewable energy (RE) heating systems	120
UEERE0031	Design stand-alone renewable energy (RE) systems	40
UEERE0032	Design wind energy conversion systems (WECS) rated to 10 kW	60
UEERE0033	Develop engineering solutions to renewable energy (RE) problems	60
UEERE0034	Diagnose and rectify faults in renewable energy (RE) control systems	60
UEERE0035	Install ELV stand-alone photovoltaic power systems	60
UEERE0036	Install small wind energy conversion systems rated up to 10 kW for ELV stand-alone applications	20
UEERE0037	Install, configure and commission LV micro-hydro systems rated up to 6.4 kW	40
UEERE0038	Install, configure and commission LV wind energy conversion systems rated up to 10 kW	40
UEERE0039	Install, set up and maintain ELV micro-hydro systems rated up to 6.4 kW	20
UEERE0040	Maintain and monitor remote area essential service operations	120
UEERE0041	Maintain operation of remote area power generation plant	120
UEERE0042	Manage renewable energy (RE) projects	40
UEERE0043	Plan periodic maintenance schedules of remote area power supplies (RAPS)	40
UEERE0044	Plan renewable energy (RE) projects	60
UEERE0045	Solve basic problems in micro-hydro systems	20
UEERE0046	Solve problems in stand-alone renewable energy (RE) systems	60

Unit Code	Unit Title	Nominal Hours
UEERE0047	Solve problems in wind energy conversion systems (WECS) rated up to 10 kW	60
UEERE0048	Verify compliance and functionality of an extra-low voltage renewable energy installation	20
UEERE0049	Apply safe work practices in the rooftop solar industry	20
UEERE0050	Identify and isolate multiple supply systems	20
UEERE4001	Install, maintain and fault find battery storage systems for grid-connected photovoltaic systems	60
UEERE5001	Design battery storage systems for grid-connected photovoltaic systems	80
UEERL0001	Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt supply	20
UEERL0002	Attach cords, cables and plugs to electrical equipment for connection to 1000 V a.c. or 1500 V d.c.	20
UEERL0003	Conduct in-service safety testing of electrical cord connected equipment and cord assemblies	20
UEERL0004	Disconnect - reconnect electrical equipment connected to low voltage (LV) installation wiring	60
UEERL0005	Locate and rectify faults in low voltage (LV) electrical equipment using set procedures	20
UEERL0006	Attach HV flexible cables and plugs	40
UEERL0007	Disconnect-reconnect 3.3 kV electric propulsion components of self-propelled earth moving vehicles	60
UEERL0008	Disconnect-reconnect explosion-protected appliances and control devices connected to LV installation	60
UEERS0001	Assemble and wire internal electrical rail signalling equipment	20
UEERS0002	Decommission electrical and electromechanical rail signalling from service	20
UEERS0003	Develop rail signalling system maintenance programs	20
UEERS0004	Find and repair rail signalling system faults	20
UEERS0005	Install and maintain active level crossing equipment	20

Unit Code	Unit Title	Nominal Hours
UEERS0006	Install and maintain computer-based interlocking rail systems	20
UEERS0007	Install and maintain non-vital screen-based control systems	20
UEERS0008	Install and maintain non-vital telemetry systems	20
UEERS0009	Install and maintain power-operated point actuating devices	20
UEERS0010	Install and maintain rail signalling power supplies	20
UEERS0011	Install and maintain rail track circuit leads and bonds	20
UEERS0012	Install and maintain trackside signal and train protection equipment	20
UEERS0013	Install and maintain train detection equipment	20
UEERS0014	Install and maintain vital relay interlocking systems	20
UEERS0015	Maintain electronic and microprocessor-based remote control systems	20
UEERS0016	Maintain mechanical rail signalling equipment and infrastructure	20
UEERS0017	Repair rail signalling power and control cables	20
UEERS0018	Test and commission rail power equipment	20
UEERS0019	Test copper rail signalling cables	20

# Contacts and Links

Curriculum Maintenance Manager (CMM)		
CMM Engineering Industries	<p>The CMM Service is provided on behalf of Higher Education and Skills.</p> <p>CMM Service Executive Officers can assist with questions on payable and nominal hours.</p>	<p>George Adda Supervising Executive Officer Private Bag 2014, Box Hill, Victoria 3128 (03) 9286 9880 <a href="mailto:g.adda@boxhill.edu.au">g.adda@boxhill.edu.au</a></p> <p>Alternative Contact Steve Bryant (03) 9286 9934 0479 184 251 <a href="mailto:Steven.bryant@boxhill.edu.au">Steven.bryant@boxhill.edu.au</a></p>
Service Skills Organisation (SSO)		
Australian Industry Standards	<p>This SSO is responsible for developing the UEE Electrotechnology Training Package and can be contacted for further information.</p>	<p>(03) 9604 7200 See <a href="http://AustralianIndustryStandards.org.au">AustralianIndustryStandards.org.au</a> for more information.</p>
National Register for VET in Australia		
Training.gov.au (TGA)	<p>TGA is the Australian government's official National Register of information on Training Packages, qualifications, courses, units of competency and RTOs.</p>	<p>See <a href="http://training.gov.au">training.gov.au</a> for more information.</p>
Australian Government		
Department of Education, Skills and Employment	<p>The Commonwealth Department is responsible for national policies and programmes that help Australians access quality vocational education and training.</p>	<p>See <a href="http://dese.gov.au">dese.gov.au</a> for more information.</p>
State Government		
Department of Education and Training (DET)	<p>DET is the State Training Authority responsible for supporting implementation of Vocational Education and Training (VET) in Victoria.</p>	<p>(03) 9637 2000 See <a href="http://education.vic.gov.au">education.vic.gov.au</a> for more information.</p>

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 <a href="http://asqa.gov.au">asqa.gov.au</a> for more information.
Victorian 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 <a href="http://vrqa.vic.gov.au">vrqa.vic.gov.au</a>
Industry Regulatory Bodies		
Energy Safe Victoria (ESV)	The industry Regulatory body can provide advice on licensing, legislative or regulatory requirements that may impact on the delivery of training or the issuance of qualifications in this Training Package.	(03) 9203 9700 <a href="mailto:info@esv.vic.gov.au">info@esv.vic.gov.au</a> More information is available from <a href="http://esv.vic.gov.au">esv.vic.gov.au</a> .
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.	222 Exhibition Street, Melbourne 3000 (03) 9641 1444 or 1800 136 089 (toll free) <a href="mailto:info@worksafe.vic.gov.au">info@worksafe.vic.gov.au</a> See <a href="http://worksafe.vic.gov.au">worksafe.vic.gov.au</a> for further information.

# Glossary

<b>Code</b>	Nationally endorsed Training Package qualification code.
<b>Title</b>	Nationally endorsed Training Package qualification title.
<b>Unit Code</b>	Nationally endorsed Training Package unit code.
<b>Unit Title</b>	Nationally endorsed Training Package unit title.
<b>Maximum Payable Hours</b>	<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>
<b>Scope of Registration</b>	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.
<b>Nominal Hours</b>	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.