

**Victorian Purchasing Guide
for
MEM
Manufacturing and Engineering
Training Package
Release 1
May 2015**



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Victorian Purchasing Guide - Version History

Training Package Version	Date VPG Released	Comments
MEM – Manufacturing and Engineering Training Package Release 1	22 June 2015	Initial Release of the MEM Manufacturing and Engineering Training Package

MEM – Manufacturing and Engineering Training Package Victorian Purchasing Guide

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INTRODUCTION

What is a Victorian Purchasing Guide?

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

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

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

They also contain sample training programs which reflect a vocational outcome for the particular qualification it has been developed for.

Victorian Government subsidised training

To deliver government subsidised training in Victoria, an RTO must have an approved VET funding contract with the Department of Education and Training (DET).

The VET funding contract and related guidelines set out the requirements that RTOs must abide by to maintain compliance as contracted providers in receipt of government subsidy. The contract and guidelines set standards of behaviour, as well as prescribing minimum requirements with regard to provider practice in the delivery of training services.

For further information relating to obtaining a VET funding contract, please visit the Skills Victoria Training System (SVTS) website: <http://www.education.vic.gov.au/svts>

QUALIFICATIONS

Code	Title	Minimum Payable Hours	Maximum Payable Hours
MEM31215	Certificate III in Engineering – Industrial Electrician	1055	1100

UNITS OF COMPETENCY

Unit Code	Unit Title	Nominal Hours
MEM10016	Terminate and test electrical wiring and accessories	40
MEM10018	Select cable types and sizes to suit loads and electrical installation environment	40
MEM10019	Select circuit protection devices by type and rating, fit to switchboards and install earthing	40
MEM10020	Install low voltage cabling and fit-off accessories, appliances and equipment	40
MEM10021	Inspect, test and verify electrical installations	40
MEM10022	Commission and decommission high and low voltage equipment or installations	40
MEM10023	Design and connect control switching of circuits for building services and industrial equipment	40
MEM10024	Install and troubleshoot luminaires and ancillary equipment	40
MEM10025	Undertake a capstone assessment	10
MEM13016	Work in hazardous areas	20
MEM13017	Apply safety practices, procedures and compliance standards associated with licensed electrical work	20
MEM18100	Fault-find, test and rectify AC machines and circuits	40
MEM18102	Fault-find, test and rectify single and three-phase transformers	40
MEM18103	Fault-find, test and rectify electrical circuits and equipment	40
MEM18104	Dismantle, replace and assemble electrical components and equipment	40
MEM18105	Disconnect and reconnect high voltage fixed wired equipment	40
MEM18106	Terminate communication and data cables	40
MEM18108	Troubleshoot analog and digital electronic equipment	40
MEM18109	Troubleshoot instrumentation systems and equipment	40

SAMPLE TRAINING PROGRAMS

The following pages list a range of Sample Training Programs across the different qualification levels within the **MEM – Manufacturing and Engineering Training Package** to demonstrate how units might be packaged to meet a particular vocational outcome.

Occupation/ Work Function	Industrial Electrician	
Qualification Title	Certificate III in Engineering - Industrial Electrician	
Qualification Code	MEM31215	
Description	Appropriate for a person working as a Licensed Industrial Electrician in the Mining, Oil or Gas industries.	
Notes	For advice on how to choose electives others than those listed below, please refer to the Manufacturing and Engineering Training Package and its Qualifications Packaging Rules or contact the CMM Engineering Industries on (03)9286 9934	
Unit Code	Unit Title	Hours
Core		
MEM10016	Terminate and test electrical wiring and accessories	40
MEM10018	Select cable types and sizes to suit loads and electrical installation environment	40
MEM10019	Select circuit protection devices by type and rating, fit to switchboards and install earthing	40
MEM10020	Install low voltage cabling and fit-off accessories, appliances and equipment	40
MEM10021	Inspect, test and verify electrical installations	40
MEM10022	Commission and decommission high and low voltage equipment or installations	40
MEM10023	Design and connect control switching of circuits for building services and industrial equipment	40
MEM10024	Install and troubleshoot luminaires and ancillary equipment	40
MEM10025	Undertake a capstone assessment	10
MEM12023A	Perform engineering measurements	30
MEM12024A	Perform computations	30
MEM13014A	Apply principles of occupational health and safety in the work environment	10
MEM13017	Apply safety practices, procedures and compliance standards associated with licensed electrical work	20
MEM14004A	Plan to undertake a routine task	10
MEM14005A	Plan a complete activity	20
MEM15002A	Apply quality systems	20
MEM15024A	Apply quality procedures	10
MEM16006A	Organise and communicate information	20
MEM16007A	Work with others in a manufacturing, engineering or related environment	10
MEM16008A	Interact with computing technology	20
MEM17003A	Assist in the provision of on the job training	20
MEM18001C	Use hand tools	20
MEM18100	Fault-find, test and rectify AC machines and circuits	40

MEM18102	Fault-find, test and rectify single and three-phase transformers	40
MEM18103	Fault-find, test and rectify electrical circuits and equipment	40
MEM18104	Dismantle, replace and assemble electrical components and equipment	40
MSAENV272B	Participate in environmentally sustainable work practices	30
UEENEEE101A	Apply Occupational Health and Safety regulations, codes and practices in the workplace	20
UEENEEE104A	Solve problems in d.c. circuits	80
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
<i>Elective</i>		
MEM18109	Troubleshoot instrumentation systems and equipment	40
MEM13016	Work in hazardous areas	20
Total		1100

CONTACTS AND LINKS

Curriculum Maintenance Manager (CMM)		
Engineering Industries	The CMM Service is provided by Executive Officers, across all industry areas covered by Training Packages. They can assist with questions on payable and nominal hours.	Dennis Crowley Box Hill Institute Private Bag 2014, Box Hill VIC, 3128 Phone: (03) 9286-9934 Fax: (03) 9286-9838 Email: D.Crowley@boxhill.edu.au
Industry Skills Council (ISC)		
Manufacturing Skills Australia	This ISC is responsible for developing this MEM – Manufacturing and Engineering Training Package , companion volumes and support material and can be contacted for further information.	Phone: 1800 358 458 Fax: (02) 9955 8044 Email: info@mskills.org.au Web: http://www.mskills.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, Accredited Courses, qualifications, units of competency and RTOs.	http://training.gov.au
Australian Government		
Department of Education and Training	The Commonwealth Department is responsible for national policies and programmes that help Australians access quality vocational education and training.	https://education.gov.au/
Victorian State Government		
Department of Education and Training (DET)	DET is responsible for funding and the implementation of Vocational Education and Training (VET) in Victoria, including Apprenticeships and Traineeships policy.	(03) 9637 2000 www.education.vic.gov.au
National VET Regulatory Authority		
Australian Skills Quality Authority (ASQA)	ASQA is the national regulator for Australia's VET sector.	Info line: 1300 701 801 www.asqa.gov.au
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 www.vrqa.vic.gov.au

Industry Regulatory Bodies applicable to this Training Package		
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.	Phone: (03) 9203 9700 Fax: (03) 9686 2197 Email: info@esv.vic.gov.au Web: http://www.esv.vic.gov.au/
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 Info line: 1800 136 089

GLOSSARY

Code	Nationally endorsed Training Package qualification code.
Title	Nationally endorsed Training Package qualification title.
Unit Code	Nationally endorsed Training Package unit of competency code.
Unit Title	Nationally endorsed Training Package unit of competency title.
Payable Hours	The maximum number of hours the Victorian Government will subsidise under the Victorian Training Guarantee for the achievement of the minimum realistic vocational outcome of any 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.
Nominal Hours	Nominal hours reflect the anticipated time taken to deliver and assess the outcomes of a unit of competency excluding unsupervised delivery or the time taken for repeated practical application of skills. Nominal hours are determined by the Victorian State Training Authority (DET) and are primarily developed for funding purposes in Victoria.