

Victorian Purchasing Guide
for
PMC Manufactured Mineral Products
Training Package
Release 1.0

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Victorian Purchasing Guide — Version History

Training Package Version	Date VPG Approved	Comments
PMC Manufactured Mineral Products Training Package Release No 1	4/8/2016	Release 1 of the PMC Manufactured Mineral Products Training Package consolidates all qualifications from the PMC10 Training Package. Please refer to the Implementation Guide for further details: https://vetnet.education.gov.au/Pages/default.aspx

PMC Manufactured Mineral Products Training Package Victorian Purchasing Guide

CONTENTS

INTRODUCTION	5
What is a Victorian Purchasing Guide?	5
Registration	5
QUALIFICATIONS	6
UNITS OF COMPETENCY AND NOMINAL HOURS	7
SAMPLE TRAINING PROGRAMS	10
CONTACTS AND LINKS	16
GLOSSARY	18



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 for Victoria responsible for the registration of education and training providers in VET who provide courses to domestic students only and who only offer training in Victoria only or Victoria and Western Australia only.

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	Minimum Payable Hours	Maximum Payable Hours
PMC20116	Certificate II in Manufactured Mineral Products	542	570
PMC30116	Certificate III in Manufactured Mineral Products	922	970
PMC40116	Certificate IV in Manufactured Mineral Products	1164	1225
PMC50116	Diploma of Manufactured Mineral Products	589	620
PMC60116	Advanced Diploma of Manufactured Mineral Products	922	970
PMC80116	Graduate Certificate in Refractories Engineering	504	530

UNITS OF COMPETENCY AND NOMINAL HOURS

RTOs are advised that there is a mapping inside the Training Package (Companion Volume) that describes the relationship between new units and superseded or replaced units from the previous version of **PMC Manufactured Mineral Products Training Package, Release 1**. 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 **PMC Manufactured Mineral Products Training Package, Release 1** is conducted against the Training Package units of competency and complies with the assessment requirements.

List of the Units of Competency and Nominal Hours

Unit Code	Unit Title	Nominal Hours
PMC552002	Operate equipment to blend/mix materials	40
PMC552003	Operate grinding equipment	40
PMC552004	Prepare for production	30
PMC552005	Process greenware/green products	20
PMC552006	Operate an autoclave	30
PMC552007	Heat accelerate the curing of precast concrete	60
PMC552008	Operate crushing equipment	40
PMC552010	Operate a calcining kiln	30
PMC552020	Operate slip casting equipment	40
PMC552021	Operate manual glazing equipment	30
PMC552022	Prepare materials for clay and ceramic production	30
PMC552023	Finish products after firing	20
PMC552024	Hand mould products	30
PMC552030	Operate a firing kiln	30
PMC552031	Operate extrusion equipment	30
PMC552032	Operate pressing equipment	40
PMC552040	Operate glass melting process	50
PMC552041	Operate process ovens	40
PMC552042	Operate blown insulation equipment	50
PMC552043	Operate float forming equipment	50
PMC552044	Operate fibre forming equipment	50
PMC552045	Operate container forming equipment	40
PMC552046	Operate glass printing equipment	40
PMC552047	Operate primary annealing equipment	50
PMC552048	Operate glass finishing equipment	40
PMC552049	Operate on-line stacking and assembly equipment	40
PMC552050	Schedule, cut and bend reinforcement	40
PMC552051	Finish green concrete products	40
PMC552052	Cast moulded concrete products	40

Unit Code	Unit Title	Nominal Hours
PMC552053	Finish cured concrete products	40
PMC552054	Spin concrete pipes	40
PMC552055	Conduct benching operations	40
PMC552056	Assemble, fabricate and place reinforcement	30
PMC552057	Finish casting operation	20
PMC552058	Demould concrete products	20
PMC552060	Batch mix concrete	40
PMC552061	Deliver concrete to site	30
PMC552065	Prepare asphalt	40
PMC552070	Operate forming equipment	40
PMC552072	Produce fibrous plasterboard	30
PMC552090	Use and maintain tools and equipment for refractory operations	30
PMC552091	Prepare for, install and repair refractory brickwork/blockwork	40
PMC552092	Prepare for and install mouldable refractory materials	40
PMC552093	Prepare for and cast refractory materials	40
PMC552094	Prepare for and apply shotcrete for installation	40
PMC552095	Prepare for, install and repair ceramic fibre	40
PMC553000	Set up and tune a process	50
PMC553010	Process raw meal into product	40
PMC553020	Prepare moulds and dies	40
PMC553021	Set up and tune glazing equipment	50
PMC553040	Set up and optimise glass forming process	80
PMC553041	Set up and optimise glass furnace process	80
PMC553042	Set up and optimise secondary process	40
PMC553050	Produce architectural precast concrete	50
PMC553051	Produce structural precast concrete	60
PMC553070	Design and construct moulds for fibrous plaster products	40
PMC553072	Model fibrous plaster products	60
PMC553080	Set up and optimise finishing process	30
PMC554020	Design and prepare models, moulds and dies	40
PMC554090	Undertake simple refractory design	40
PMC554091	Analyse refractory failures	30
PMC555030	Analyse equipment performance	50
PMC555031	Choose materials for an application	50
PMC556031	Design structural/mechanical components	60
PMC557001	Manage trials	40
PMC557090	Select refractory materials for an application	50
PMC557091	Design a refractory lining	50
PMC557092	Specify and interpret refractory tests	40

Unit Code	Unit Title	Nominal Hours
PMC557093	Design a refractory/ceramic component	40
PMC557094	Investigate refractory failures	40
PMC557095	Specify and monitor the installation of monolithic/castable refractories	40
PMC557096	Specify and monitor the installation of block/precast refractories	40
PMC557097	Specify and monitor repairs to refractory installations	40
PMC557098	Specify refractory installation systems	40
PMC561072	Store materials for production	20
PMC561080	Organise self	20
PMC562070	Move materials	30
PMC562071	Operate bulk materials handling equipment	30
PMC562081	Deliver customer service	20
PMC562083	Allocate and complete team tasks	20
PMC563081	Carry out stock control	20



SAMPLE TRAINING PROGRAMS

A range of Sample Training Plans have been provided to demonstrate the flexibility of qualifications contained in the **PMC Manufactured Mineral Products Training Package**, but are by no means mandatory.

Occupation	Process Plant Operator	
Qualification Title	Certificate II in Manufactured Mineral Products	
Qualification Code	PMC20116	
Description	Appropriate for a person working as a plant operator in a continuous chemical or refined processing enterprise.	
Comments	15 units required	
Unit Code	Unit Title	Hours
Core		
MSMENV272	Participate in environmentally sustainable work practices	30
MSMOPS101	Make measurements	30
MSMSUP100	Apply workplace context to own job	20
MSMSUP101	Clean workplace or equipment	20
MSMSUP102	Communicate in the workplace	20
MSMWHS200	Work safely	30
Electives		
MSMOPS200	Operate equipment	40
PMAOPS216	Operate local control system	40
PMAOPS305	Operate process control systems	60
PMC552040	Operate glass melting process	50
PMC552043	Operate float forming equipment	50
PMC552047	Operate primary annealing equipment	50
PMC552048	Operate glass finishing equipment	40
PMC552049	Operate on-line stacking and assembly equipment	40
PMC553000	Set up and tune a process	50
Total Hours		570

Occupation	Process Plant Operator	
Qualification Title	Certificate III in Manufactured Mineral Products	
Qualification Code	PMC30116	
Description	Appropriate for a person working as a plant operator in a continuous chemical or refining processing enterprise.	
Comments	20 units required	
Unit Code	Unit Title	Hours
Core		
MSMENV272	Participate in environmentally sustainable work practices	30
MSMOPS101	Make measurements	30
MSMSUP100	Apply workplace context to own job	20
MSMSUP101	Clean workplace or equipment	20
MSMSUP102	Communicate in the workplace	20
MSMWHS200	Work safely	30
Elective Units		
MSL973001	Perform basic tests	60
MSL974005	Perform physical tests	100
MSMOPS200	Operate equipment	40
MSMSUP303	Identify equipment faults	40
MSS402080	Undertake root cause analysis	50
PMAOPS305	Operate process control systems	60
PMAOPS405	Operate complex control systems	80
PMC552002	Operate equipment to blend/mix materials	40
PMC552040	Operate glass melting process	50
PMC552041	Operate process ovens	40
PMC552043	Operate float forming equipment	50
PMC553000	Set up and tune a process	50
PMC553040	Set up and optimise glass forming process	80
PMC553041	Set up and optimise glass furnace process	80
Total Hours		970

Occupation	Plant Technician	
Qualification Title	Certificate IV in Manufactured Mineral Products	
Qualification Code	PMC40116	
Description	Appropriate for a person working as a plant technician in a continuous chemical or refining processing enterprise.	
Comments	24 units required	
Unit Code	Unit Title	Hours
Core		
MSMENV272	Participate in environmentally sustainable work practices	30
MSMOPS101	Make measurements	30
MSMSUP100	Apply workplace context to own job	20
MSMSUP101	Clean workplace or equipment	20
MSMSUP102	Communicate in the workplace	20
MSMSUP200	Achieve work outcomes	30
MSMWHS200	Work safely	30
Electives		
MSL973001	Perform basic tests	60
MSL974005	Perform physical tests	100
MSMOPS400	Optimise process/plant area	60
MSMOPS401	Trial new process or product	60
MSMSUP406	Identify problems in electronic control systems	50
MSS403002	Ensure process improvements are sustained	50
MSS404060	Facilitate the use of planning software systems in a work area or team	50
MSS404081	Undertake proactive maintenance analyses	50
MSS404082	Assist in implementing a proactive maintenance strategy	50
PMAOPS305	Operate process control systems	60
PMAOPS402	Respond to abnormal process situations	50
PMAOPS405	Operate complex control systems	80
PMC552040	Operate glass melting process	50
PMC552043	Operate float forming equipment	50
PMC553040	Set up and optimise glass forming process	80
PMC553041	Set up and optimise glass furnace process	80
PSPPM402B	Manage simple projects	65
Total Hours		1225

Occupation	Technical Team Leader/Emergency Response Coordinator	
Qualification Title	Diploma of Manufactured Mineral Products	
Qualification Code	PMC50116	
Description	Appropriate for a person working as a technical team leader and coordinating emergency response in a chemical or refining enterprise.	
Comments	10 Units	
Unit Code	Unit Title	Hours
Core		
MSMENV272	Participate in environmentally sustainable work practices	30
MSMSUP200	Achieve work outcomes	30
MSMSUP210	Process and record information	30
MSMWHS200	Work safely	30
Electives		
MSS405050	Determine and improve process capability	80
MSTGN5004	Manage installation and commissioning of equipment and systems	80
PMAOPS500	Optimise production systems	100
PMAOPS501	Provide operational expertise to a project team	80
PMAOPS505	Control the process during abnormal situations	80
PSPPM502B	Manage complex projects	80
Total Hours		620

Occupation	Operation's Manager	
Qualification Title	Advanced Diploma of Manufactured Mineral Products	
Qualification Code	PMC60116	
Description	Appropriate for a person working as an operation's manager in a continuous processing chemical or refining enterprise.	
Comments	15 Units	
Unit Code	Unit Title	Hours
Core		
MSMENV272	Participate in environmentally sustainable work practices	30
MSMSUP200	Achieve work outcomes	30
MSMSUP210	Process and record information	30
MSMWHS200	Work safely	30
Electives		
MSMWHS510	Manage risk	50
MSS015002	Develop strategies for more sustainable use of resources	70
MSS405050	Determine and improve process capability	80
MSS405070	Develop and manage sustainable energy practices	70
MSS405075	Facilitate the development of a new product	80
MSTGN5004	Manage installation and commissioning of equipment and systems	80
PMAOPS500	Optimise production systems	100
PMAOPS501	Provide operational expertise to a project team	80
PMAOPS505	Control the process during abnormal situations	80
PMAOPS601	Debottleneck plant	80
PSPPM502B	Manage complex projects	80
Total Hours		970

Occupation	Refractories Engineering Specialist	
Qualification Title	Graduate Certificate in Refractories Engineering	
Qualification Code	PMC80116	
Description	Appropriate for a person working in the development of surface coating materials for a range of applications.	
Comments	10 Units	
Unit Code	Unit Title	Hours
Core		
MSMWHS200	Work safely	30
PMC557090	Select refractory materials for an application	50
PMC557091	Design a refractory lining	50
Electives		
MSS407002	Review operations practice tools and techniques	80
MSS407007	Respond to a major non-conformance	80
MSS407012	Lead a process to determine and solve root cause for a complex problem	80
PMC557095	Specify and monitor the installation of monolithic/castable refractories	40
PMC557096	Specify and monitor the installation of block/precast refractories	40
PMC557097	Specify and monitor repairs to refractory installations	40
PMC557098	Specify refractory installation systems	40
Total Hours		530

CONTACTS AND LINKS

Curriculum Maintenance Manager (CMM)		
General Manufacturing	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.	Paul Saunders Address: Chisholm Institute, PO Box 684, Dandenong, Vic. 3175. Phone/fax: 03 9238 8448 Email: paul.saunders@chisholm.edu.au
Skills Service Organisation (SSO)		
Manufacturing Skills Australia	This organisation is responsible for developing this PMC Manufactured Minerals Products Training Package R1 and can be contacted for further information. You can also source copies of the Training Package and support material.	Address: PO Box 289, North Sydney, NSW, 2089. Phone: 02 9955 5500 Email: info@mskills.com.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, qualifications, courses, units of competency and RTOs.	Web: 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/
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		
Victorian Work Cover Authority	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.	Address: Level 24, 222 Exhibition Street, Melbourne, 3000. Phone: 03 9641 1555 Email: info@workcover.vic.gov.au Web: http://www.workcover.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.	Info line: 1800 136 089 Web: www.worksafe.vic.gov.au

GLOSSARY

Code	Nationally endorsed Training Package qualification code.
Title	Nationally endorsed Training Package qualification title.
Unit Code	Nationally endorsed Training Package unit code.
Unit Title	Nationally endorsed Training Package unit title.
Maximum Payable Hours	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 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.
Minimum Payable Hours	The number of hours the Victorian government designates as the minimum required to deliver a qualification, taking into account contextualisation and integrated delivery efficiencies.
Scope of Registration	Scope of registration specifies the AQF qualifications and/or units of competency the training organisation is registered to issue and the industry training and/or assessment services it is registered to provide.
Nominal Hours	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