

**Victorian Purchasing Guide
for
PMB07 Plastics, Rubber and Cable Making Training
Package Version No 1.1**

February 2012





© State of Victoria (Department of Education and Early Childhood Development) 2012.

Copyright of this material is reserved to the Crown in the right of the State of Victoria. This work is licensed under a Creative Commons Attribution-NoDerivs 3.0 Australia licence (<http://creativecommons.org/licenses/by-nd/3.0/au/>). You are free to use, copy and distribute to anyone in its original form as long as you attribute Higher Education and Skills Group, Department of Education and Early Childhood Development as the author, and you license any derivative work you make available under the same licence.

Disclaimer

In compiling the information contained in and accessed through this resource, the Department of Education and Early Childhood Development (DEECD) 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 DEECD, 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, DEECD 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. DEECD 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 — Version History

Training Package Version	Date VPG Approved	Comments
PMB07 Plastics, Rubber and Cable Making Training Package Version 1.1	6/2/2012	<p>This Victorian Purchasing Guide reflects the changes made to PMB07 Plastics, Rubber and Cable Making Training Package Version 1.1. This includes</p> <ul style="list-style-type: none"> • Sample programs amended to reflect new Elective Groups A,B,C etc. • Core unit MSAPMSUP200A replaced by MSAENV272B in PMB20107,PMB30107 and PMB40107. • Core unit MSAENV472A replaced with 'B' version in PMB50107 and PMB60107. <p>Refer to Training Package for further details</p>
1	May 2008	Initial release of new version.

PMB07 Plastics, Rubber and Cable Making 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	12
CONTACTS AND LINKS	23
GLOSSARY	25

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	
		Minimum	Maximum
PMB20107	Certificate II in Polymer Processing	400	500
PMB30107	Certificate III in Polymer Processing	700	860
PMB40107	Certificate IV in Polymer Technology	980	1240
PMB50107	Diploma of Polymer Technology	800	1050
PMB60107	Advanced Diploma of Polymer Technology	1400	1800

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 **PMB07 Plastics, Rubber and Cable Making 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 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
PMBFIN201C	Finish products and components	30
PMBFIN202C	Fit attachments to products	30
PMBFIN203C	Repair product imperfections	30
PMBFIN205C	Hand decorate products	40
PMBHAN103C	Shift materials safely by hand	20
PMBHAN208C	Store products	20
PMBPREP201B	Prepare moulds for composites production	30
PMBPREP205C	Assemble materials and equipment for production	30
PMBPREP206C	Prepare materials to formulae	30
PMBPREP301C	Set up and prepare for production	30
PMBPREP303C	Set up equipment for continuous operation	30
PMBPREP304C	Set a die	50
PMBPREP305B	Change extrusion die and setup	50
PMBPROD206B	Operate ancillary equipment	40
PMBPROD207B	Operate Calendar	70
PMBPROD209C	Operate cable winding equipment	40
PMBPROD210B	Operate injection moulding equipment	70
PMBPROD211B	Operate blow moulding equipment	70
PMBPROD212B	Operate thermoforming equipment	60
PMBPROD213B	Operate extruders	70
PMBPROD216B	Operate blown film equipment	70
PMBPROD217B	Operate printing equipment	40
PMBPROD221B	Operate rotational moulding equipment	60
PMBPROD229B	Operate polystyrene shape moulding equipment	40
PMBPROD233B	Operate film conversion equipment	60
PMBPROD235C	Use materials and process knowledge to complete work operations	50
PMBPROD236C	Operate hand held air/power equipment for production processes	40
PMBPROD237C	Splice cables	40
PMBPROD238A	Perform creel rack operations	30

Unit Code	Unit Title	Nominal Hours
PMBPROD239A	Build reinforced conveyor belts	40
PMBPROD240C	Cut materials	30
PMBPROD241C	Lay up rubber lining or lag pulleys	30
PMBPROD242A	Bond polymers to surfaces	40
PMBPROD245C	Fabricate materials	40
PMBPROD246C	Hand mix materials	20
PMBPROD247C	Hand lay up composites	60
PMBPROD248C	Prepare surfaces for coating	20
PMBPROD249B	Apply liquid surface coatings	30
PMBPROD251B	Apply gel coat or other polymer surface finish	30
PMBPROD252C	Operate compounding equipment	50
PMBPROD253C	Operate an internal mill blender	30
PMBPROD254C	Operate an open mill blender	30
PMBPROD255C	Operate mixing equipment	30
PMBPROD259C	Operate granulating equipment	30
PMBPROD261B	Operate continuous vulcanising equipment	30
PMBPROD262B	Operate tyre curing equipment	30
PMBPROD263B	Operate retread curing equipment	20
PMBPROD264C	Check recycle wash process	10
PMBPROD265C	Operate portable vulcanising equipment	20
PMBPROD266B	Prepare tyre casings for retreading	20
PMBPROD267B	Operate steel cutting equipment	20
PMBPROD268B	Operate bead coiling equipment	20
PMBPROD270B	Operate injection blow moulding equipment	70
PMBPROD280B	Operate resin-glass depositor equipment	40
PMBPROD281B	Finish composite products	40
PMBPROD282B	Assemble mould	20
PMBPROD283B	Demould product	30
PMBPROD284B	Operate open flame moulding equipment	40
PMBPROD285A	Operate computer controlled equipment	40
PMBPROD287B	Weld plastics materials	50
PMBPROD290B	Operate filament winding equipment	30
PMBPROD291B	Operate resin infusion moulding equipment	30
PMBPROD292B	Operate pultrusion equipment	40
PMBPROD293B	Operate vacuum bagging equipment	40
PMBPROD294B	Operate resin transfer moulding equipment	30
PMBPROD295B	Operate composite sheeting equipment	30
PMBPROD296B	Operate centrifugal casting equipment	30
PMBPROD297B	Operate equipment using moulding compounds	30

Unit Code	Unit Title	Nominal Hours
PMBPROD298B	Operate equipment using pre-preg material	40
PMBPROD300B	Produce products	40
PMBPROD301C	Draw wire	40
PMBPROD302C	Bunch and strand wire	40
PMBPROD303C	Lay up and tape cables	40
PMBPROD304C	Wind products onto drums	20
PMBPROD305C	Colour optical fibre	40
PMBPROD306B	Prepare and start equipment for production	30
PMBPROD307C	Produce calendered products	70
PMBPROD308B	Take a machine out of production	30
PMBPROD309C	Produce electroplated products	50
PMBPROD310C	Produce injection moulded products	60
PMBPROD311C	Produce blow moulded products	60
PMBPROD312C	Produce continuous thermoforming products	60
PMBPROD313C	Produce extruded products	60
PMBPROD314C	Produce compression moulded products	50
PMBPROD315C	Produce polyurethane foam	40
PMBPROD316C	Produce blown film	60
PMBPROD317C	Print and decorate rigid products	40
PMBPROD318C	Build first stage tyres	40
PMBPROD319C	Build up rollers	40
PMBPROD320C	Produce foam injected mouldings	60
PMBPROD321B	Produce rotational moulded products	60
PMBPROD323C	Produce powder coated products	40
PMBPROD324B	Inspect tyres for retreading	20
PMBPROD325B	Lay on tyre retreads	20
PMBPROD326B	Inspect tyres	20
PMBPROD327B	Produce finished tyres	40
PMBPROD328C	Produce sheet feed vacuum forming products	50
PMBPROD329C	Produce polystyrene shape moulded products	50
PMBPROD330A	Make moulds for formed products	50
PMBPROD331C	Produce printed and decorated film	40
PMBPROD332C	Produce thermally bent products	40
PMBPROD333B	Convert plastic film	50
PMBPROD334A	Produce products using twin screw extruders	70
PMBPROD335C	Build second stage tyres	40
PMBPROD339A	Produce reinforced conveyor belts	50
PMBPROD343C	Shut down plant area	20
PMBPROD347B	Produce composites using hand lamination	50

Unit Code	Unit Title	Nominal Hours
PMBPROD349B	Produce liquid surface coated products	40
PMBPROD352A	Produce compounded materials	40
PMBPROD353B	Compound materials using an internal mill blender	30
PMBPROD354B	Compound materials using an open mill blender	30
PMBPROD355B	Make pattern/plug for composites moulds	80
PMBPROD356C	Construct moulds for composite products	60
PMBPROD357C	Construct jigs and fixtures	40
PMBPROD358C	Develop patterns	60
PMBPROD360B	Produce centrifugally cast polyurethane products	50
PMBPROD362B	Produce gravity cast polyurethane products	50
PMBPROD367B	Remove and replace conveyor belts	20
PMBPROD368B	Repair conveyor belt carcass	30
PMBPROD369B	Repair conveyor belt covers	30
PMBPROD370B	Produce injection blow moulded products	70
PMBPROD372B	Produce fibre optic preforms	50
PMBPROD373B	Draw optical fibre	40
PMBPROD375B	Vulcanise products using an autoclave	40
PMBPROD376A	Splice steel cord conveyor belts	40
PMBPROD377A	Splice fabric ply conveyor belts	40
PMBPROD378A	Splice solid woven conveyor belts	40
PMBPROD380B	Produce composites using chopper gun/depositor	50
PMBPROD384A	Operate multi-axis router	60
PMBPROD385A	Program computer controlled equipment	40
PMBPROD387B	Produce welded plastics materials	50
PMBPROD390B	Produce composites using filament winding	40
PMBPROD391B	Produce composites using resin infusion	30
PMBPROD392B	Produce composites using pultrusion	30
PMBPROD393B	Produce composites using vacuum bagging	40
PMBPROD394B	Produce composites using resin transfer moulding	30
PMBPROD395B	Produce composite sheet products	30
PMBPROD396B	Produce composites using centrifugal casting	30
PMBPROD397B	Produce composites using moulding compounds	30
PMBPROD398B	Produce composites using pre-pregs	30
PMBPROD430B	Trial a new die/tool	60
PMBPROD431B	Trial a new, advanced or complex mould	40
PMBTECH301B	Use material and process knowledge to solve problems	40
PMBTECH302A	Modify existing compounds	40
PMBTECH303A	Make minor modifications to products	40
PMBTECH401B	Predict polymer properties and characteristics	60

Unit Code	Unit Title	Nominal Hours
PMBTECH402B	Set advanced or complex dies	60
PMBTECH403B	Test fibre- composites materials and laminates	40
PMBTECH404B	Mould chemical resistant and/or fire retardant fibre-composites	40
PMBTECH405B	Repair damaged fibre-composites structures	50
PMBTECH406A	Diagnose production equipment problems	50
PMBTECH501B	Analyse equipment performance	50
PMBTECH502B	Review and analyse production trials and specify retrials	60
PMBTECH503B	Determine rheology and output of plastics materials from processing equipment	70
PMBTECH504B	Determine heat transfer loads for processing equipment	50
PMBTECH505B	Choose polymer materials for an application	50
PMBTECH506B	Analyse the design of products and tools	80
PMBTECH507B	Develop fibre composite products using cored- laminate techniques	70
PMBTECH508A	Develop a new compound	60
PMBTECH509A	Modify an existing product	50
PMBTECH510A	Analyse failure in polymeric materials	60
PMBTECH601B	Develop a new product	100
PMBTECH602B	Develop a new die or tool	150
PMBTECH603B	Design structural/mechanical polymer components	100
PMBWASTE101C	Collect waste for recycling or safe disposal	20
PMBWASTE302C	Coordinate waste disposal	20
PMBWELD301B	Butt weld polyethylene plastic pipelines	20
PMBWELD302B	Electrofusion weld polyethylene pipelines	20
PMBWELD303B	Install polyethylene (non-pressure) drainage pipelines	20
PMBWELD304B	Design polyethylene (non-pressure) drainage pipelines	20
PMBWELD305B	Install polyethylene plastic pressure pipelines	20
PMBWELD306B	Design polyethylene plastic pressure pipelines	20
PMBWELD307B	Install high temperature plastic pressure pipelines	30
PMBWELD308B	Install PVC plastic pressure pipelines	20
PMBWELD309B	Weld plastic using extrusion techniques	20
PMBWELD310B	Design PVC plastic pressure pipelines	20
PMBWELD311B	Design high temperature plastic pressure pipelines	20

SAMPLE TRAINING PROGRAMS

A range of Sample Training Plans have been provided to demonstrate the flexibility of qualifications contained in the **PMB07 Version 1.1 Plastics, Rubber and Cablemaking Training Package**, but are by no means mandatory.

Occupation / Work Function	Operator – Injection Moulding	
Qualification Title	Certificate II in Polymer Processing	
Qualification Code	PMB20107	
Description	Appropriate for a person undertaking a traineeship as an Injection Moulding Operator	
Unit Code	Unit Title	Hours
Core		
MSAPMOHS200A	Work safely	30
MSAENV272B	Participate in environmentally sustainable work practices	30
MSAPMSUP210A	Process and record information	30
Group A		
PMBPREP205C	Assemble materials and equipment for production	30
PMBPROD210B*	Operate injection moulding equipment	70
PMBPROD206B	Operate ancillary equipment	40
PMBPROD235C	Use materials and process knowledge to complete work operations	50
Group B		
MSACMT251A	Apply quality standards	30
MSAPMSUP106A	Work in a team	30
MEM16008A	Interact with computing technology	20
MEM18001C	Use hand tools	20
MSAPMSUP240A	Undertake minor maintenance	30
MSAPMSUP291A	Participate in continuous improvement	30
MSACMS201A	Sustain process improvements	40
Total Hours		480

*This sample program can be used for a number of plastics processing sectors by exchanging this unit for another 'Operate' unit eg PMBPROD211B Operate blow moulding equipment.

Occupation / Work Function	Operator – Fibre Reinforced Plastics/Composites	
Qualification Title	Certificate II in Polymer Processing	
Qualification Code	PMB20107	
Description	Appropriate for a person undertaking a traineeship in an enterprise manufacturing FRP/composite products	
Unit Code	Unit Title	Hours
Core		
MSAPMOHS200A	Work safely	30
MSAENV272B	Participate in environmentally sustainable work practices	30
MSAPMSUP210A	Process and record information	30
Group A		
PMBPREP201B	Prepare moulds for composites production	30
PMBPROD246C	Hand mix materials	20
PMBPROD251B	Apply gel coat or other polymer surface finish	30
PMBPROD247C	Hand lay up composites	60
PMBPROD280B	Operate resin-glass depositor equipment	40
PMBPROD283B	Demould product	30
PMBFIN203C	Repair product imperfections	30
PMBPROD281B	Finish composite products	40
PMBFIN202C	Fit attachments to product	30
PMBPROD235C	Use materials and process knowledge to complete work operations	50
PMBPROD236C	Operate handheld air/power equipment for production processes	40
Total Hours		490

Occupation / Work Function	Plastics Fabricator	
Qualification Title	Certificate II in Polymer Processing	
Qualification Code	PMB20107	
Description	Appropriate for a person undertaking a traineeship in an enterprise manufacturing plastics fabricated products	
Unit Code	Unit Title	Hours
Core		
MSAPMOHS200A	Work safely	30
MSAENV272B	Participate in environmentally sustainable work practices	30
MSAPMSUP210A	Process and record information	30
Group A		
PMBPREP205C	Assemble materials and equipment for production	30
PMBPROD235C	Use materials and process knowledge to complete work operations.	50
PMBPROD236C	Operate hand held air/power equipment for production processes.	40
PMBPROD240C	Cut materials	30
PMBPROD242A	Bond polymers to surface	40
PMBPROD245C	Fabricate materials	40
PMBPROD287B	Weld plastic materials	50
PMBPROD332C	Produce thermally bent products	40
PMBFIN202C	Fit attachments to products	30
Group B		
MSAPMSUP106A	Work in a team	30
MSAPMSUP240A	Undertake minor maintenance	30
Total Hours		500

Occupation / Work Function	Plastics Injection Moulding Technician	
Qualification Title	Certificate III in Polymer Processing (Injection Moulding)	
Qualification Code	PMB30107	
Description	Appropriate for a person working as a plastics technician in a plastics process enterprise.	
Unit Code	Unit Title	Hours
Core		
MSACMT251A	Apply quality standards	30
MSAPMOHS200A	Work safely	30
MSAENV272B	Participate in environmentally sustainable work practices	30
MSAPMSUP210A	Process and record information	30
Group A		
PMBPREP303C	Set up equipment for continuous operation	30
PMBPREP304C	Set a die	50
PMBPROD385A	Program computer controlled equipment	40
PMBPROD310C*	Produce injection moulded products	60
PMBTECH301B	Use material and process knowledge to solve problems	40
MEM09002B	Interpret technical drawing	40
MSAPMOPS405A	Identify problems in fluid power system	50
MSAPMOPS406A	Identify problems in electronic control systems	50
Group B		
MSAPMSUP303A	Identify equipment faults	40
MSAPMSUP300A	Identify and implement opportunities to maximise production efficiencies	40
MSAPMSUP330A	Develop and adjust a production schedule	30
MSAPMSUP390A	Use structured problem solving tools	40
MSAPMSUP106A	Work in a team	30
MSAPMOHS300A	Facilitate the implementation of OHS for a work group	40
Group C		
PMBPROD206B	Operate ancillary equipment	40
PMBPROD210B*	Operate injection moulding equipment	70
PMBPROD235C	Use materials and process knowledge to complete work operations	50
Total Hours		860

* By exchanging these units for other 'Operate' or 'Produce' units this sample program is applicable to a number of plastics processing sectors.

Occupation / Work Function	Fibre Reinforced Plastics/Composites Technician	
Qualification Title	Certificate III in Polymer Processing (FRP/Composites)	
Qualification Code	PMB30107	
Description	Appropriate for a person working as a FRP/Composite technician in an enterprise manufacturing FRP/Composite products.	
Unit Code	Unit Title	Hours
Core		
MSACMT251A	Apply quality standards	30
MSAPMOHS200A	Work safely	30
MSAENV272B	Participate in environmentally sustainable work practices	30
MSAPMSUP210A	Process and record information	30
Group A		
PMBPROD347B	Produce composites using hand lamination	50
PMBTECH405B	Repair damaged fibre-composites structures	50
PMBPROD355B	Make pattern/plug for composites moulds	80
PMBPROD356C	Construct moulds for composite products	60
PMBTECH301B	Use material and process knowledge to solve problems	40
MEM09002B	Interpret technical drawing	40
Group B		
MSACMS201A	Sustain process improvements	40
Group C		
PMBPREP201B	Prepare moulds for composites production	30
PMBPROD246C	Hand mix materials	20
PMBPROD251B	Apply gel coat or other polymer surface finish	30
PMBPROD247C	Hand lay up composites	60
PMBPROD280B	Operate resin-glass depositor equipment	40
PMBPROD283B	Demould product	30
PMBFIN203C	Repair product imperfections	30
PMBPROD281B	Finish composite products	40
PMBFIN202C	Fit attachments to products	30
PMBPROD235C	Use materials and process knowledge to complete work operations	50
Total Hours		840

Occupation / Work Function	Plastics Fabrication Technician	
Qualification Title	Certificate III in Polymer Processing (Plastics Fabrication)	
Qualification Code	PMB30107	
Description	Appropriate for a person working as a plastics fabrication technician in an enterprise manufacturing plastics fabricated products	
Unit Code	Unit Title	Hours
Core		
MSACMT251A	Apply quality standards	30
MSAPMOHS200A	Work safely	30
MSAENV272B	Participate in environmentally sustainable work practices	30
MSAPMSUP210A	Process and record information	30
Group A		
MEM09002B	Interpret technical drawing	40
PMBPROD328C	Produce sheet feed vacuum forming products	50
PMBPROD332C	Produce thermally bent products	40
PMBPROD357C	Construct jigs and fixtures	40
PMBPROD358C	Develop patterns	60
PMBPROD384A	Operate multi-axis router	60
PMBPROD387B	Produce welded plastics materials	50
PMBTECH301B	Use material and process knowledge to solve problems	40
Group B		
MSAPMSUP303A	Identify equipment faults	40
MSAPMSUP382A	Provide coaching/mentoring in the workplace	40
Group C		
PMBPREP205C	Assemble materials and equipment for production	30
PMBPROD235C	Use materials and process knowledge to complete work operations	50
PMBPROD236C	Operate hand held air/power equipment for production processes	40
PMBPROD240C	Cut materials	30
PMBPROD242A	Bond polymers to surface	40
PMBPROD245C	Fabricate materials	40
PMBPROD287B	Weld plastics materials	50
Total hours		860

Occupation / Work Function	Advanced Plastics Technician	
Qualification Title	Certificate IV in Polymer Technology	
Qualification Code	PMB40107	
Description	Appropriate for a person working as an advanced injection moulding technician in a medium to large plastics processing enterprise.	
Unit Code	Unit Title	Hours
Core		
MSACMT251A	Apply quality standards	30
MSAPMOHS200A	Work safely	30
MSAENV272B	Participate in environmentally sustainable work practices	30
MSAPMSUP210A	Process and record information	30
Group A		
MSAPMOPS400A	Optimise process/plant area	60
MSAPMOPS405A	Identify problems in fluid power system	50
MSAPMOPS406A	Identify problems in electronic control systems	50
PMBPROD430B	Trial a new die/tool	60
PMBTECH401B	Predict polymer properties and characteristics	60
PMBTECH402B	Set advanced or complex dies	60
PMBTECH406A	Diagnose production equipment problems	50
Group B		
MSACMS401A	Ensure process improvements are sustained	50
MSAPMOHS300A	Facilitate the implementation of OHS for a work group	40
MSAPMSUP300A	Identify and implement opportunities to maximise production efficiencies	40
MSAPMSUP303A	Identify equipment faults	40
MSAPMSUP330A	Develop and adjust a production schedule	30
MSAPMSUP390A	Use structured problem solving tools	40
Group C		
MEM09002B	Interpret technical drawing	40
PMBPREP303C	Set up equipment for continuous operations	30
MSAPMSUP200A	Achieve work outcomes	30
PMBPREP304C	Set a die	50

Certificate IV in Polymer Processing (Cont.)		
PMBPROD210B	Operate injection moulding equipment	70
PMBPROD235C	Use materials and process knowledge to complete work operations	50
PMBPROD259C	Operate granulating equipment	30
PMBPROD310C	Produce injection moulded products	60
PMBPROD385A	Program computer controlled equipment	40
PMBTECH301B	Use material and process knowledge to solve problems	40
TAEDEL301A	Provide work skill instruction	40
Total hours		1230

Occupation / Work Function	Polymer Laboratory Technician	
Qualification Title	Diploma of Polymer Technology	
Qualification Code	PMB50107	
Description	Appropriate for a person working in the laboratory of a large plastics processing enterprise.	
Notes	Person completing this qualification is expected to have completed Certificate IV or be able to demonstrate equivalent competency.	
Unit Code	Unit Title	Hours
Core		
MSAENV472B	Implement and monitor environmentally sustainable work practices	40
MSAPMOHS200A	Work safely	30
MSAPMSUP300A	Identify and implement opportunities to maximise production efficiencies	40
MSAPMSUP390A	Use structured problem solving tools	40
Group A		
PMBTECH502B	Review and analyse production trials and specify retrials	60
PMBTECH503B	Determine rheology and output of plastics materials from processing equipment	70
PMBTECH504B	Determine heat transfer loads for processing equipment	50
PMBTECH505B	Choose polymer materials for an application	50
PMBTECH506B	Analyse the design of products and tools	80
PMBTECH510A	Analyse failure in polymeric materials	60
Group B		
MSAPMOPS401A	Trial new process or product	60
MSL974003A	Perform chemical tests and procedures	100
MSL974005A	Perform physical tests	100
MSL974010A	Perform mechanical tests	80
PMBTECH401B	Predict polymer properties and characteristics	60
Group C		
MEM09002A	Interpret technical drawing	40
PMBTECH301B	Use material and process knowledge to solve problems	40
Total Hours		1000

Occupation / Work Function	Polymer Technologist	
Qualification Title	Advanced Diploma of Polymer Technology	
Qualification Code	PMB60107	
Description	Appropriate for a person working as a polymer technologist in a very large polymer processing enterprise	
Unit Code	Unit Title	Hours
Core		
MSAENV472B	Implement and monitor environmentally sustainable work practices	40
MSAPMOHS200A	Work safely	30
MSAPMSUP300A	Identify and implement opportunities to maximise production efficiencies	40
MSAPMSUP390A	Use structured problem solving tools	40
Group A		
MSAPMOPS601A	Design equipment and system modifications	80
PMBTECH601B	Develop a new product	100
PMBTECH602B	Develop a new die or tool	150
PMBTECH603B	Design structural/mechanical polymer components	100
Group B		
PMBTECH501B	Analyse equipment performance	50
PMBTECH502B	Review and analyse production trials and specify retrials	60
PMBTECH503B	Determine rheology and output of plastics materials from processing equipment	70
PMBTECH504B	Determine heat transfer loads for processing equipment	50
PMBTECH505B	Choose polymer materials for an application	50
PMBTECH506B	Analyse the design of products and tools	80
PMBTECH509A	Modify an existing product	50
PMBTECH510A	Analyse failure in polymeric materials	60
Group C		
MSAPMOPS401A	Trial new process or product	60
PMBPROD430B	Trial a new die/tool	60
PMBTECH401B	Predict polymer properties and characteristics	60

Advanced Diploma of Polymer Technology (Cont.)		
MSL974003A	Perform chemical tests and procedures	100
MSL974005A	Perform physical tests	100
MSL974010A	Perform mechanical tests	80
Group D		
MEM09002B	Interpret technical drawing	40
MEM09003B	Prepare basic engineering drawing	40
MEM15001B	Perform basic statistical quality control	20
PMBTECH301B	Use material and process knowledge to solve problems	40
Total Hours		1650

CONTACTS AND LINKS

Industry Skills Council (ISC)		
Manufacturing Skills Australia	This ISC is responsible for developing the PMB07 Plastics, Rubber and Cablemaking Training Package 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/fax: 02 9955 5500/ 02 9955 8044. 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.	www.training.gov.au
Australian Government		
The Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education	DIICCSRTE provides a range of services and resources to assist in delivery of Training Packages. Search the DIICCSRTE website for links to a range of relevant resources and publications.	http://www.innovation.gov.au/pages/default.aspx
State Government		
Department of Education and Early Childhood Development Higher 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 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)		
General Manufacturing	The CMM service is provided by Executive Officers located within Victorian TAFE institutes on behalf of Higher Education and Skills Group.	Trevor Lange Address: Chisholm Institute, PO Box 684, Dandenong, Vic. 3175. Phone/fax: 9238 8448 / 9238 8504 Email: t.lange@chisholm.edu.au Web: http://trainingsupport.skills.vic.gov.au/

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 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 Info line: 1300 701 801
Industry Regulatory Body		
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.	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 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.