



Australian Government

PMC60116 Advanced Diploma of Manufactured Mineral Products

Release 1

PMC60116 Advanced Diploma of Manufactured Mineral Products

Modification History

Release 1. Supersedes and is equivalent to PMC60110 Advanced Diploma of Manufactured Mineral Products.

Qualification Description

The PMC60116 Advanced Diploma of Manufactured Mineral Products covers the skills and knowledge required to perform high-level technical and para-professional operations within the manufactured mineral products industries.

The qualification is suitable to develop existing workers or to prepare new entrants to perform a senior technologist, advanced technician or similar role.

The technologist will be able to apply significant depth and breadth of theoretical knowledge of materials, product and processes, analyse and synthesise technical information, take a lead role in solving complex technical problems and design products and/or modifications to plant. The technologist may also have some supervisory responsibilities.

They are not required to be competent to operate production equipment but will understand the principles behind the relevant production and support processes.

This qualification can be accessed by direct entry. However, entrants for the qualification should already possess some operational and/or technical skills from relevant experience or qualifications. For this reason the qualification is not suitable as an entry-level qualification for school leavers.

The PMC60116 Advanced Diploma of Manufactured Mineral Products contains units of competency that can be credited towards other manufacturing qualifications such as:

- PMC80116 Graduate Certificate in Refractories Engineering
- MSS70116 Graduate Certificate in Sustainable Operations.
- MSS60316 Advanced Diploma of Competitive Systems and Practices
- Other manufacturing Advanced Diplomas.

There are no specific licenses that relate to this qualification. However, some units of competency in this qualification may have licensing or regulatory requirements. Local regulations should be checked for details.

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To be awarded the PMC60116 Advanced Diploma of Manufactured Mineral Products competency must be achieved in **fifteen (15)** units of competency:

- **four (4)** core units of competency
- **eleven (11)** elective units of competency from Groups A and B, chosen as specified below.
 - A minimum of **two (2)** specialist elective units must be chosen from Group A
 - The balance of units, to a maximum of **nine (9)**, may be drawn from Groups A or B, with a maximum of **seven (7)** from Group B2, to bring the total number of electives to **eleven (11)**.

Up to **four (4)** relevant units of competency may be chosen from this Training Package, other endorsed Training Packages and accredited courses, as specified in Group B2.

Where prerequisite units apply, these must be counted in the total number of units required for achievement of the qualification.

Core units of competency

Unit code	Unit title	
MSMENV272	Participate in environmentally sustainable work practices	
MSMWHS200	Work safely	
MSMSUP200	Achieve work outcomes	
MSMSUP210	Process and record information	
<p>Elective units of competency</p> <p>Group A - Specialist electives</p>		
Unit code	Unit title	Prerequisites
MSS405075	Facilitate the development of a new product	MSS404052
PMAOPS600	Modify plant	

PMAOPS601	Debottleneck plant	
PMC556031	Design structural/mechanical components	PMC555031
Group B - Other electives		
Group B1		
Unit code	Unit title	Prerequisites
PMAOPS500	Optimise production systems	
PMAOPS501	Provide operational expertise to a project team	
PMAOPS505	Control the process during abnormal situations	
PMAOPS511	Determine energy transfer loads	
PMAOPS512	Determine mass transfer loads	
PMAOPS520	Manage utilities	
PMAOPS521	Plan plant shutdown	
PMAOPS522	Coordinate plant shutdown	
PMBTECH502	Review and analyse production trials and specify retrials	MSMOPS401
PMC555030	Analyse equipment performance	
PMC555031	Choose materials for an application	
Group B2		
Unit code	Unit title	Prerequisites
LMTGN5004A	Manage installation and commissioning of equipment and systems	
MEM09002B	Interpret technical drawing	
MEM09003B	Prepare basic engineering drawing	MEM09002B

MSS015002	Develop strategies for more sustainable use of resources	
MSS404052	Apply statistics to operational process	
MSS404081	Undertake proactive maintenance analyses	
MSS404082	Assist in implementing a proactive maintenance strategy	
MSS405010	Manage relationships with non-customer external organisations	
MSS405011	Manage people relationships	
MSS405012	Manage workplace learning	
MSS405040	Manage 5S system in an organisation	
MSS405041	Implement improvement systems in an organisation	
MSS405050	Determine and improve process capability	MSS404052
MSS405060	Develop the application of enterprise control systems in an organisation	
MSS405061	Determine and establish information collection requirements and processes	
MSS405070	Develop and manage sustainable energy practices	
MSS405081	Develop a proactive maintenance strategy	
MSMENV672	Develop workplace policy and procedures for sustainability	
MSMWHS503	Maintain the workplace WHS management system	
MSMWHS510	Manage risk	
MSMOPS401	Trial new process or product	
PMASUP520	Review procedures to minimise environmental impact of process	
PSPPM502B	Manage complex projects	

Up to **four (4)** relevant units of competency may be chosen from this Training Package, other endorsed Training Packages and accredited courses, where those units are packaged in Certificate IV, Diploma and Advanced Diploma.

Qualification Mapping Information

Release 1. Supersedes and is equivalent to PMC60110 Advanced Diploma of Manufactured Mineral Products.

Links

MSA Training Package Implementation Guides - <http://mskills.org.au/training-packages/info/>