



Australian Government

PMC40116 Certificate IV in Manufactured Mineral Products

Release 1

PMC40116 Certificate IV in Manufactured Mineral Products

Modification History

Release 1. Supersedes and is equivalent to PMC40110 Certificate IV in Manufactured Mineral Products.

Qualification Description

The PMC40116 Certificate IV in Manufactured Mineral Products covers the skills and knowledge required to perform a range of technical operations within the manufactured mineral products industries.

The qualification is suitable to develop existing workers or to prepare new entrants to perform a plant technician role.

The technician will be able to apply specialised theoretical and technical knowledge and well developed skills in situations that require autonomy, discretion and judgement.

The technician will be able to solve complex problems which require in depth theoretical knowledge combined with an understanding of the production process and equipment across the plant.

For people who require a more generalist qualification covering the application of good manufacturing practice and lean principles see MSS40316 Certificate IV in Competitive Systems and Practices.

The PMC40116 Certificate IV in Manufactured Mineral Products contains units of competency that can be credited towards other manufacturing qualifications such as:

- PMC50116 Diploma of Manufactured Mineral Products
- MSS50116 Diploma of Sustainable Operations
- MSS50316 Diploma of Competitive Systems and Practices
- MSM50316 Diploma of Production Management.

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 PMC40116 Certificate IV in Manufactured Mineral Products competency must be achieved in **twenty-four (24)** units of competency:

- **seven (7)** core units of competency
- **seventeen (17)** elective units of competency from Groups A and B, chosen as specified below.
 - A minimum of **one (1)** specialist elective unit must be chosen from Group A
 - The balance of units, to a maximum of **sixteen (16)**, may be drawn Groups A and B, with a maximum of **thirteen (13)** from Group B2, to bring the total number of electives to seventeen (17).

Up to **eight (8)** of the elective units of competency can be chosen from other qualifications in this Training Package, other endorsed Training Packages and accredited courses, as specified in Groups B1 and B2.

Note: 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
MSMSUP100	Apply workplace procedures
MSMSUP101	Clean workplace or equipment
MSMSUP102	Communicate in the workplace
MSMSUP200	Achieve work outcomes
Select one (1) of the following units. Note that only one of MSMOPS101 OR PMAOPS101 may be included in this qualification, not both.	
MSMOPS101	Make measurements

PMAOPS101	Read dials and indicators	
Elective units of competency Group A - Specialist electives		
Unit code	Unit title	Prerequisites
MSMOPS400	Optimise process/plant area	MSMSUP390
MSMOPS401	Trial new process or product	
MSMSUP404	Coordinate maintenance	
MSMSUP405	Identify problems in fluid power system	
MSMSUP406	Identify problems in electronic control systems	
PMAOPS402	Respond to abnormal process situations	MSMSUP390
PMAOPS405	Operate complex control systems	
PMC554020	Design and prepare models, moulds and dies	
PMC554090	Undertake simple refractory design	
PMC554091	Analyse refractory failures	
Group B - Other electives Group B1		
Unit code	Unit title	Prerequisites
MSS403002	Ensure process improvements are sustained	
MSS403011	Facilitate implementation of competitive systems and practices	
MSS403013	Lead team culture improvement	
MSS403030	Improve cost factors in work practices	

MSS403040	Facilitate and improve implementation of 5S	
MSS403041	Facilitate breakthrough improvements	
MSS403051	Mistake proof an operational process	
MSS404050	Undertake process capability improvements	MSS404052
MSS404052	Apply statistics to operational processes	
MSS404060	Facilitate the use of planning software systems in a work area or team	
MSS404081	Undertake proactive maintenance analyses	
MSS404082	Assist in implementing a proactive maintenance strategy	
MSMENV472	Implement and monitor environmentally sustainable work practices	
MSMWHS400	Contribute to WHS management system	
MSMWHS401	Assess risk	
MSMPER400	Coordinate permit process	MSMPER300
PMASUP420	Minimise environmental impact of process	
PSPPM402B	Manage simple projects	
TAEASS401	Plan assessment activities and processes	
TAEASS402	Assess competence	
TAEASS403	Participate in assessment validation	
TAEASS502	Design and develop assessment tools	
Up to two (2) relevant units may be chosen from this Training Package, other endorsed Training Packages and accredited courses, where those units are available at Certificate IV or Diploma.		
Group B2		
Unit code	Unit title	Prerequisites

MEM09002B	Interpret technical drawing	
RIIRIS201D	Conduct local risk control	
MSS402030	Apply cost factors to work practices	
MSS402031	Interpret product costs in terms of customer requirements	
MSS402040	Apply 5S procedures	
MSS402050	Monitor process capability	
MSS402051	Apply quality standards	
MSS402060	Use planning software systems in operations	
MSS402080	Undertake root cause analysis	
MSS402081	Contribute to the application of a proactive maintenance strategy	
MSMWHS300	Facilitate the implementation of WHS for a work group	MSMWHS200
MSMOPS100	Use equipment	
MSMOPS200	Operate equipment	
MSMOPS212	Use enterprise computers or data systems	
MSMPER200	Work in accordance with an issued permit	
MSMPER201	Monitor and control work permits	
MSMPER202	Observe permit work	
MSMPER205	Enter confined space	
MSMPER300	Issue work permits	MSMWHS201
MSMSUP106	Work in a team	
MSAPMSUP201A	Receive or despatch goods	
MSMSUP210	Process and record information	
MSMSUP230	Monitor process operations	

MSMSUP240	Undertake minor maintenance	
MSMSUP280	Manage conflict at work	
MSMSUP292	Sample and test materials and product	
MSMSUP300	Identify and implement opportunities to maximise production efficiencies	
MSMSUP303	Identify equipment faults	
MSMSUP310	Contribute to development of plant documentation	
MSMSUP330	Develop and adjust a production schedule	
MSMSUP382	Provide coaching/mentoring in the workplace	
MSMSUP390	Use structured problem solving tools	
MSL952001	Collect routine site samples	
MSL973001	Perform basic tests	
MSL974005	Perform physical tests	
PMAOPS105	Select and prepare materials	
PMAOPS216	Operate local control system	
PMAOPS305	Operate process control systems	
PMBHAN103	Shift materials safely by hand	
PMC552002	Operate equipment to blend/mix materials	
PMC552003	Operate grinding equipment	
PMC552004	Prepare for production	
PMC552005	Process greenware/green products	
PMC552006	Operate an autoclave	
PMC552007	Heat accelerate the curing of precast concrete	
PMC552008	Operate crushing equipment	
PMC552010	Operate a calcining kiln	

PMC552020	Operate slip casting equipment	
PMC552021	Operate manual glazing equipment	
PMC552022	Prepare materials for clay and ceramic production	
PMC552023	Finish products after firing	
PMC552024	Hand mould products	
PMC552030	Operate a firing kiln	
PMC552031	Operate extrusion equipment	
PMC552032	Operate pressing equipment	
PMC552040	Operate glass melting process	
PMC552041	Operate process ovens	
PMC552042	Operate blown insulation equipment	
PMC552043	Operate float forming equipment	
PMC552044	Operate fibre forming equipment	
PMC552045	Operate container forming equipment	
PMC552046	Operate glass printing equipment	
PMC552047	Operate primary annealing equipment	
PMC552048	Operate glass finishing equipment	
PMC552049	Operate on-line stacking and assembly equipment	
PMC552050	Schedule, cut and bend reinforcement	
PMC552051	Finish green concrete products	
PMC552052	Cast moulded concrete products	
PMC552053	Finish cured concrete products	
PMC552054	Spin concrete pipes	
PMC552055	Conduct benching operations	

PMC552056	Assemble, fabricate and place reinforcement	
PMC552057	Finish casting operation	
PMC552058	Demould concrete products	
PMC552060	Batch mix concrete	
PMC552061	Deliver concrete to site	
PMC552065	Prepare asphalt	
PMC552070	Operate forming equipment	
PMC552072	Produce fibrous plasterboard	
PMC552090	Use and maintain tools and equipment for refractory operations	
PMC552091	Prepare for, install and repair refractory brickwork/blockwork	
PMC552092	Prepare for and install mouldable refractory materials	
PMC552093	Prepare for and cast refractory materials	
PMC552094	Prepare for and apply shotcrete for installation	
PMC552095	Prepare for, install and repair ceramic fibre	
PMC553000	Set up and tune a process	
PMC553010	Process raw meal into product	PMC552010
PMC553020	Prepare moulds and dies	
PMC553021	Set up and tune glazing equipment	
PMC553040	Set up and optimise glass forming process	
PMC553041	Set up and optimise glass furnace process	
PMC553042	Set up and optimise secondary process	
PMC553050	Produce architectural precast concrete	
PMC553051	Produce structural precast concrete	

PMC553070	Design and construct moulds for fibrous plaster products	PMC552024
PMC553072	Model fibrous plaster products	
PMC553080	Set up and optimise finishing process	
PMC561072	Store materials for production	
PMC561080	Organise self	
PMC562070	Move materials	
PMC562071	Operate bulk materials handling equipment	
PMC562081	Deliver customer service	
PMC562083	Allocate and complete team tasks	
PMC563081	Carry out stock control	
TAEASS301	Contribute to assessment	
TAEDEL301	Provide work skill instruction	
TLIC3003	Drive medium rigid vehicle	
TLIC3004	Drive heavy rigid vehicle	
TLID2010	Operate a forklift	
<p>Note: Only one of TLIC3003 or TLIC3004A may be included in this qualification, not both.</p> <p>Up to six (6) relevant units may be chosen from this Training Package; other endorsed Training Packages and accredited courses, where those units are available at Certificate II, III, IV or Diploma.</p>		

Qualification Mapping Information

Release 1. Supersedes and is equivalent to PMC40110 Certificate IV in Manufactured Mineral Products.

Links

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