



Australian Government

MEM20422 Certificate II in Engineering Pathways

Release 1

MEM20422 Certificate II in Engineering Pathways

Modification History

Release 1. Supersedes and is equivalent to MEM20413 Certificate II in Engineering Pathways.

Qualification Description

This qualification develops trade-like skills and is not intended to develop trade-level skills. As an example, the outcome level of welding skills from this qualification is not about learning trade -level theory and practice of welding; it is about being introduced to welding, how it can be used to join metal with the opportunity to weld some metal together. Similarly, with machining the outcome should be something produced on a lathe etc., not the theory and practice of machining. The focus should be on using engineering tools and equipment to produce or modify objects. This needs to be done in a safe manner for each learner including people near the learner.

This qualification applies to a learning and assessment environment where access to structured on-the-job learning in a workplace may not be available. This qualification is intended for simulated work environments.

This qualification is intended for people interested in exposure to an engineering or related working environment with a view to entering into employment in the area. It will equip graduates with knowledge and skills which will enhance their prospects of employment in an engineering or related working environment.

This qualification delivers broad-based underpinning skills and knowledge in a range of engineering and manufacturing tasks which will enhance the graduates' entry-level employment prospects for apprenticeships, traineeships or general employment in an engineering-related workplace.

The learning program should be centred around the major project.

MSMPCI101 Adapt to work in industry is a unit of competency that provides the opportunity for work placement.

No licensing, legislative or certification requirements apply to this qualification at the time of publication. Local regulations should be checked.

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

The requirement for achievement of the MEM20422 Certificate II in Engineering Pathways is the achievement of competence in twelve (12) units of competency made up of:

- all four (4) core units of competency listed below and

- a minimum of seven (7) Group A electives and
- a maximum of one (1) Group B elective as described below.

No other descriptor can be used.

Prerequisites

Prerequisite units count towards the total number of units. Units with prerequisite requirements are marked with an asterisk (refer to the individual units for details). All prerequisites are included in the qualification.

Core units of competency

Unit code	Unit title	Prereq
MEM13015	Work safely and effectively in manufacturing and engineering	
MEMPE005	Develop a career plan for the engineering and manufacturing industries	
MEMPE006	Undertake a basic engineering project	
MSMENV272	Participate in environmentally sustainable work practices	

Elective units of competency

Group A

Unit code	Unit title	Prereq
MEM11011	Undertake manual handling	*
MEM16006	Organise and communicate information	*
MEM16008	Interact with computing technology	*
MEM18001	Use hand tools	*
MEM18002	Use power tools/hand held operations	*
MEMPE001	Use engineering workshop machines	
MEMPE002	Use electric welding machines	
MEMPE003	Use oxy-acetylene and soldering equipment	
MEMPE004	Use fabrication equipment	
MEMPE007	Pull apart and re-assemble engineering mechanisms	

Group B

Unit code	Unit title	Prereq
MSMPCI101	Adapt to work in industry	
MSMSUP106	Work in a team	

Qualification Mapping Information

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Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>