

# Qualification details



## MEM30505 - Certificate III in Engineering - Technical

### Summary

Releases:	Release	Status	Release date
	2	Current	2012/06/25
	1	Replaced	2005/12/01

Usage recommendation: **Superseded**

Mapping:	Mapping	Notes	Date
	Is superseded by and equivalent to MEM30522 - Certificate III in Engineering - Technical		2022/12/19

### Training packages that include this qualification

Code	Title	Release
MEM05	Metal and Engineering Training Package	8.0 - 11.1

### Units of competency

Code	Title	Essential
MEM05051A	Select welding processes	N/A
MEM09002B	Interpret technical drawing	N/A
MEM09201A	Work effectively in an engineering drafting workplace	N/A
MEM09202A	Produce freehand sketches	N/A
MEM09203A	Measure and sketch site information	N/A
MEM09205A	Produce electrical schematic drawings	N/A
MEM09208A	Detail fasteners and locking devices in mechanical drawings	N/A
MEM09209A	Detail bearings, seals and other componentry in mechanical drawings	N/A
MEM09213A	Produce schematic drawings for hydraulic and pneumatic fluid power systems	N/A
MEM12023A	Perform engineering measurements	N/A
MEM12024A	Perform computations	N/A
MEM13013B	Work safely with ionizing radiation	N/A
MEM15001B	Perform basic statistical quality control	N/A
MEM16003B	Provide advanced customer service	N/A
MEM16006A	Organise and communicate information	N/A
MEM16008A	Interact with computing technology	N/A
MEM18001C	Use hand tools	N/A
MEM24001B	Perform basic penetrant testing	N/A
MEM24003B	Perform basic magnetic particle testing	N/A
MEM24005B	Perform basic eddy current testing	N/A
MEM24007B	Perform ultrasonic thickness testing	N/A

Code	Title	Essential
MEM24009B	Perform basic radiographic testing	N/A
MEM30005A	Calculate force systems within simple beam structures	N/A
MEM30006A	Calculate stresses in simple structures	N/A
MEM30007A	Select common engineering materials	N/A
MEM30008A	Apply basic economic and ergonomic concepts to evaluate engineering applications	N/A
MEM30009A	Contribute to the design of basic mechanical systems	N/A
MEM30010A	Set up basic hydraulic circuits	N/A
MEM30011A	Set up basic pneumatic circuits	N/A
MEM30012A	Apply mathematical techniques in a manufacturing engineering or related environment	N/A
MEM30013A	Assist in the preparation of a basic workplace layout	N/A
MEM30014A	Apply basic just in time systems to the reduction of waste	N/A
MEM30015A	Develop recommendations for basic set up time improvements	N/A
MEM30016A	Assist in the analysis of a supply chain	N/A
MEM30017A	Use basic preventative maintenance techniques and tools	N/A
MEM30018A	Undertake basic process planning	N/A
MEM30019A	Use resource planning software systems in manufacturing	N/A
MEM30020A	Develop and manage a plan for a simple manufacturing related project	N/A
MEM30021A	Prepare a simple production schedule	N/A
MEM30022A	Undertake supervised procurement activities	N/A
MEM30023A	Prepare a simple cost estimate for a manufactured product	N/A
MEM30024A	Participate in quality assurance techniques	N/A
MEM30025A	Analyse a simple electrical system circuit	N/A
MEM30026A	Select and test components for simple electronic switching and timing circuits	N/A
MEM30027A	Prepare basic programs for programmable logic controllers	N/A
MEM30028A	Assist in sales of technical products/systems	N/A
MEM30031A	Operate computer-aided design (CAD) system to produce basic drawing elements	N/A
MEM30032A	Produce basic engineering drawings	N/A
MEM30033A	Use computer-aided design (CAD) to create and display 3-D models	N/A
MSAENV272B	Participate in environmentally sustainable work practices	N/A
MSATCS301A	Interpret architectural and engineering design specifications for structural steel detailing	N/A
MSATCS302A	Detail bolts and welds for structural steelwork connections	N/A

## Classifications

Scheme	Code	Name
ANZSCO Identifier	312500	Mechanical Engineering Draftspersons And Technicians
ASCED Qualification/Course Field of Education Identifier	0307	Mechanical And Industrial Engineering And Technology
ASCO (occupation type) Identifier	312	Building And Engineering Associate Professionals
Qualification/Course Level of Education Identifier	514	Certificate III
Taxonomy - Industry Sector	N/A	Technical Engineering
Taxonomy - Occupation	N/A	Production Scheduler Assistant

## Classifications history

Scheme	Code	Name	Start date	End date
ANZSCO Identifier	312500	Mechanical Engineering Draftspersons And Technicians	2007/02/02	
ASCO (occupation type) Identifier	312	Building And Engineering Associate Professionals	2006/05/25	
ASCED Qualification/Course Field of Education Identifier	0307	Mechanical And Industrial Engineering And Technology	2006/05/25	
Qualification/Course Level of Education Identifier	514	Certificate III	2005/12/01	