

Qualification details



MEM80112 - Graduate Diploma of Engineering

Summary

Releases:	Release	Status	Release date
	1	Current	2012/12/20

Usage recommendation: **Superseded**

Mapping:	Mapping	Notes	Date
	Is superseded by and equivalent to MEM80122 - Graduate Diploma of Engineering		2022/12/19
	Supersedes and is equivalent to MEM80111 - Vocational Graduate Diploma of Engineering		2012/12/20

Training packages that include this qualification

Code	Title	Release
MEM05	Metal and Engineering Training Package	9.0 - 11.1

Units of competency

Code	Title	Essential
BSBLED705A	Plan and implement a mentoring program	N/A
BSBLED706A	Plan and implement a coaching strategy	N/A
BSBLED710A	Develop human capital	N/A
BSBREL701A	Develop and cultivate collaborative partnerships and relationships	N/A
MEM23063A	Select and test mechanical engineering materials	N/A
MEM23064A	Select and test mechatronic engineering materials	N/A
MEM23111A	Select electrical equipment and components for engineering applications	N/A
MEM23112A	Investigate electrical and electronic controllers in engineering applications	N/A
MEM23113A	Evaluate hydrodynamic systems and system components	N/A
MEM23114A	Evaluate thermodynamic systems and components	N/A
MEM23115A	Evaluate fluid power systems	N/A
MEM23116A	Evaluate programmable logic controller and related control system component applications	N/A
MEM23117A	Evaluate microcontroller applications	N/A
MEM23118A	Apply production and service control techniques	N/A
MEM23119A	Evaluate continuous improvement processes	N/A
MEM23120A	Select mechanical machine and equipment components	N/A
MEM23121A	Analyse loads on frames and mechanisms	N/A
MEM23122A	Evaluate computer integrated manufacturing systems	N/A
MEM23123A	Evaluate manufacturing processes	N/A
MEM23124A	Measure and analyse noise and vibration	N/A
MEM23125A	Evaluate maintenance systems	N/A

Code	Title	Essential
MEM234001A	Plan and manage engineering-related projects or operations	N/A
MEM234002A	Integrate engineering technologies	N/A
MEM234003A	Design machines and ancillary equipment	N/A
MEM234004A	Design for engineering-related noise and vibration mitigation	N/A
MEM234005A	Design hydrodynamic pumping systems	N/A
MEM234006A	Evaluate and select thermodynamic systems or subsystems	N/A
MEM234007A	Design fluid power systems	N/A
MEM234008A	Design plant using computer simulations	N/A
MEM234009A	Design computer-integrated manufacturing systems	N/A
MEM234010A	Design microcontroller applications	N/A
MEM234011A	Design programmable logic controller applications	N/A
MEM234012A	Design integrated maintenance management systems	N/A
MEM234013A	Plan and design engineering-related manufacturing processes	N/A
MEM234014A	Design a robotic system	N/A
MEM234015A	Design hydronic heat exchanger systems	N/A
MEM234016A	Design refrigeration systems	N/A
MEM234017A	Design exhaust, ventilation and dust collection systems	N/A
MEM234018A	Design heating, ventilation, air conditioning and refrigeration control systems	N/A
MEM234019A	Apply finite element analysis in engineering design	N/A
MEM234020A	Coordinate small lot manufacture using rapid manufacture processes	N/A
MEM234021A	Apply statistics to technology problems	N/A
MEM234022A	Apply advanced calculus to technology problems	N/A
MEM234023A	Apply differential equations to technology problems	N/A
MEM234024A	Apply advanced mathematics in technology problems	N/A
MEM234025A	Apply numerical methods to technology problems	N/A
MEM234026A	Develop and coordinate engineering-related contingency plans	N/A
MEM234027A	Plan and manage materials supply for an engineering project or manufacturing operation	N/A
MEM234028A	Produce and manage technical documentation	N/A
MEM234029A	Produce and manage technical publications	N/A
MEM234030A	Provide specialised technical and engineering guidance to other technical employees	N/A
MEM234031A	Manage installation, commissioning or modification of machines and equipment	N/A
MEM234032A	Manage fluid power related technologies in an enterprise	N/A
MEM234033A	Lead engineering-related quality operations in an enterprise	N/A
MEM234034A	Manage heating, ventilation, air conditioning and refrigeration systems or projects	N/A
MEM234035A	Maintain and apply technical and engineering skills	N/A
MSAENV672B	Develop workplace policy and procedures for environmental sustainability	N/A
MSL976003A	Evaluate and select appropriate test methods and/or procedures	N/A
MSS405007A	Introduce competitive systems and practices to a small or medium enterprise	N/A
MSS405020A	Develop quick changeover procedures	N/A
MSS405022A	Design a process layout	N/A
MSS405023A	Develop a levelled pull system for operations and processes	N/A
MSS405032A	Analyse cost implications of maintenance strategy	N/A
MSS407001A	Prepare for and implement change	N/A

Code	Title	Essential
MSS407002A	Review operations practice tools and techniques	N/A
MSS407003A	Analyse process changes	N/A
MSS407004A	Facilitate improvements in the internal value stream	N/A
MSS407005A	Undertake a qualitative review of a process change	N/A
MSS407006A	Build relationships between teams in an operations environment	N/A
MSS407007A	Respond to a major non-conformance	N/A
MSS407008A	Capture learning from daily activities in a organisation	N/A
MSS407009A	Facilitate improvements in the external value stream	N/A
MSS407010A	Improve visual management in the workplace	N/A
MSS407011A	Manage benchmarking studies	N/A
MSS407012A	Lead a problem solving process to determine and solve root cause	N/A
MSS407013A	Review continuous improvement processes	N/A
MSS408001A	Develop the competitive systems and practices approach	N/A
MSS408002A	Audit the use of competitive tools	N/A
MSS408003A	Develop models of future state operations practice	N/A
MSS408004A	Develop the value stream	N/A
MSS408005A	Develop the learning processes of the operations organisation	N/A
MSS408006A	Develop and refine systems for continuous improvement in operations	N/A
MSS408007A	Develop problem solving capability of an organisation	N/A
MSS408008A	Analyse data for relevance to organisational learning	N/A

Classifications

Scheme	Code	Name
ANZSCO Identifier	312914	Other Draftsperson
ASCED Qualification/Course Field of Education Identifier	0307	Mechanical And Industrial Engineering And Technology
ASCO (occupation type) Identifier	2128-79	Engineering Technologists Nec
Qualification/Course Level of Education Identifier	211	Graduate Diploma
Taxonomy - Industry Sector	N/A	Technical Engineering, Production Engineering, Mechanical Engineering
Taxonomy - Occupation	N/A	Principal Engineering Technical Officer

Classifications history

Scheme	Code	Name	Start date	End date
ANZSCO Identifier	312914	Other Draftsperson	2022/04/01	
ANZSCO Identifier	312999	Building And Engineering Technicians Nec	2013/05/06	2022/03/31
ASCO (occupation type) Identifier	2128-79	Engineering Technologists Nec	2013/05/06	

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ASCED Qualification/Course Field of Education Identifier	0307	Mechanical And Industrial Engineering And Technology	2013/05/06	
Qualification/Course Level of Education Identifier	211	Graduate Diploma	2012/12/20	