Australian Institute of Engineering
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AUSTRALIAN INSTITUTE OF ENGINEERING

MEM80122 Graduate Diploma of Engineering

CRICOS Course Code: 112028A

The MEM80122 Graduate Diploma of Engineering provides the skills and knowledge for people performing the role of a Principal Technical Officer or equivalent in a range of engineering disciplines.

INTAKES
We have monthly intakes available.

Please visit following link:
https://www.auie.edu.au/intake-dates/

UNITS OF STUDY
7 Units
(3 Core Units + 4 Elective Units)

DURATION
104 Weeks
(Includes 400 hours work component)

CAMPUS
Melbourne, Australia

TOTAL FEES: $23,300
Tution Fee: $20,000
Non-tuition fee: $3000
Enrolment fee: $300

CAREER OUTCOMES

Why is Engineering a great career choice?

If you are thinking of becoming an engineer, you're at the start of a great and fulfilling career choice. Engineering is about creation. Creative innovation. Changing lives. Changing the world.

Engineering today is a highly sought-after profession not just in Australia but globally. Engineering students study a wide range of subjects and the skills an engineer develops such as creative ideation, problem solving, logical deduction are valued in a range of careers.

This course allows you to acquire expertise across various engineering principles which can propel you into an exciting career in civil engineering, industrial, metallurgy, mechanical and production engineering. The world will be your oyster.

Growth prospects in Australia for engineers are 'very strong' with projected growth above 90% predicted over the next 10 years.
(source: https://joboutlook.gov.au/).

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Course Structure

Core Units

Unit Code	Unit Name
MEM234002	Integrate engineering technologies
MEM234035	Maintain and apply technical and engineering skills
MSAENV672	Develop workplace policy and procedures for environmental sustainability

Elective Units

Unit Code	Unit Name
MEM234001	Plan and manage engineering-related projects or operations
MEM234021	Apply statistics to technology problems
MEM234028	Produce and manage technical documentation
MEM234029	Produce and manage technical publications

ENTRY REQUIREMENTS

Am I Eligible?

Academic requirements for the MEM80122 Graduate Diploma of Engineering are:

- Bachelor Degree; or other higher education qualification, with relevant vocational practice in an engineering related role,or a
- an Advanced Diploma of Engineering or a Diploma of Engineering, or a
- relevant Certificate IV or Certificate III together with significant relevant vocational practice in an engineering related role.

English Language Requirements

All applicants from a non-English speaking background must also supply one of the following as a condition for admission.

- IELTS: Overall band score of 6.0
- IBT (Internet-based TOEFL): Overall score of 75 with a writing section minimum of 21
- Cambridge Certificate of Proficiency in English (CPE): Grades A, B, C and C1
- Cambridge Certificate of Advanced English (CAE): Total score of 52 or over
- English for Academic Purposes (EAP 2): Grade A or Grade B
- PTE Academic Module with score over 51
- Certificate IV in ESL

OR Completed an AQF qualification (Cert IV or higher) with a minimum duration of one year full-time study. The qualification must be less than 2 years old.

ASSESSMENT GUIDELINES

All Australian Institute of Engineering vocational courses are assessed through a combination of assessment methods including written reports, projects, role plays, presentations or essays.

Study Pathways

After achieving this qualification, candidates may undertake a Master of Engineering, Master of Business and Project Management (MBPM) or other suitable higher education qualification.

TO APPLY ONLINE GO TO:

www.auie.edu.au or contact our friendly team on info@auie.edu.au / +61 3 9302 1296

Nationally Recognised Training

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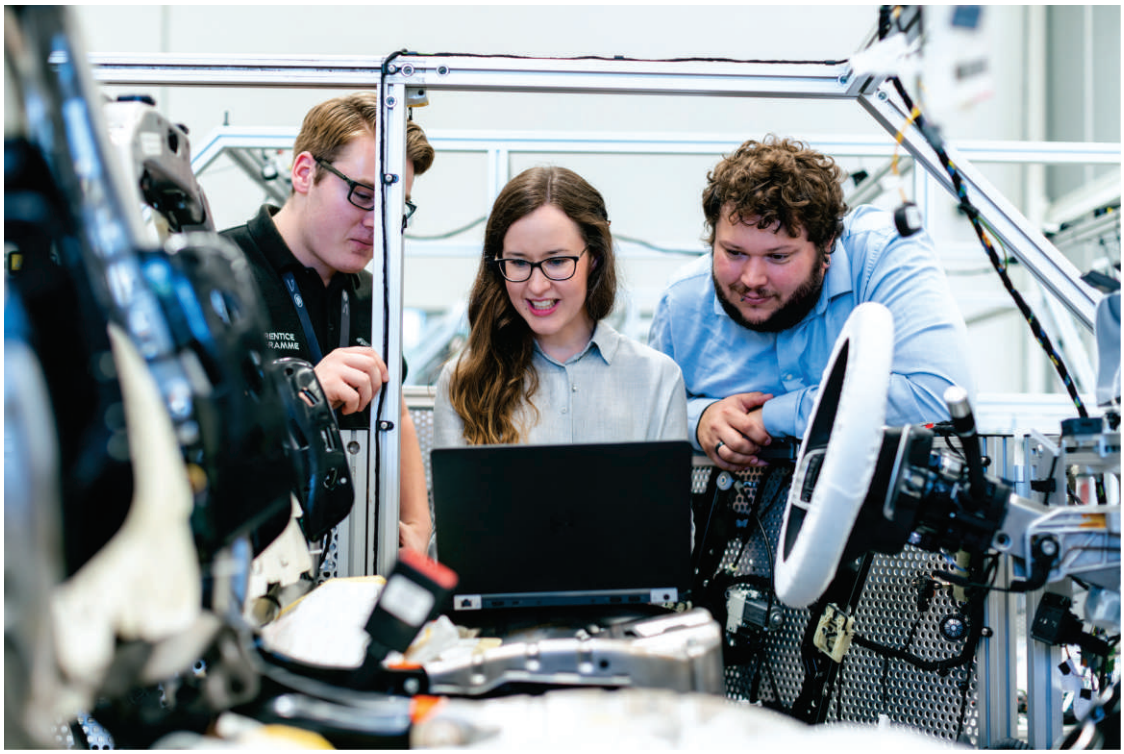
MEM80122 - GRADUATE DIPLOMA OF ENGINEERING I CRICOS Course Code: 112028A

MEM234002 - INTEGRATE ENGINEERING TECHNOLOGIES



Student Contact Hours
180

Work Placement Hours
85

Unit Descriptor

This unit of competency covers the skills required to integrate technologies, processes, components or equipment for projects or operations. Apart from engineering considerations the unit encompasses sustainability, occupational health and safety (OHS) and regulatory requirements and implications of the project.

Application of the Unit

This unit applies to individuals working as a Principal Technical Officer or in an equivalent engineering-related position who are required to integrate different technologies, processes, components or equipment. The unit applies to all forms of manufacturing and engineering operations. It is suitable for persons with system design, installation, commissioning and project or operational management responsibilities who have to integrate different technologies. The technologies may be all in one discipline or technical field or across engineering and related disciplines. For installation, commissioning and project or operational management application, the unit assumes that discretion as to the type and level of integration applies and the actual level of integration must be determined.

Prior or concurrently developed experience in the application of scientific principles, mathematics, materials, manufacturing processes, computer software for computer-aided design (CAD), system analysis, modelling and simulation, project work and risk management and experience in the technologies to be integrated is required.

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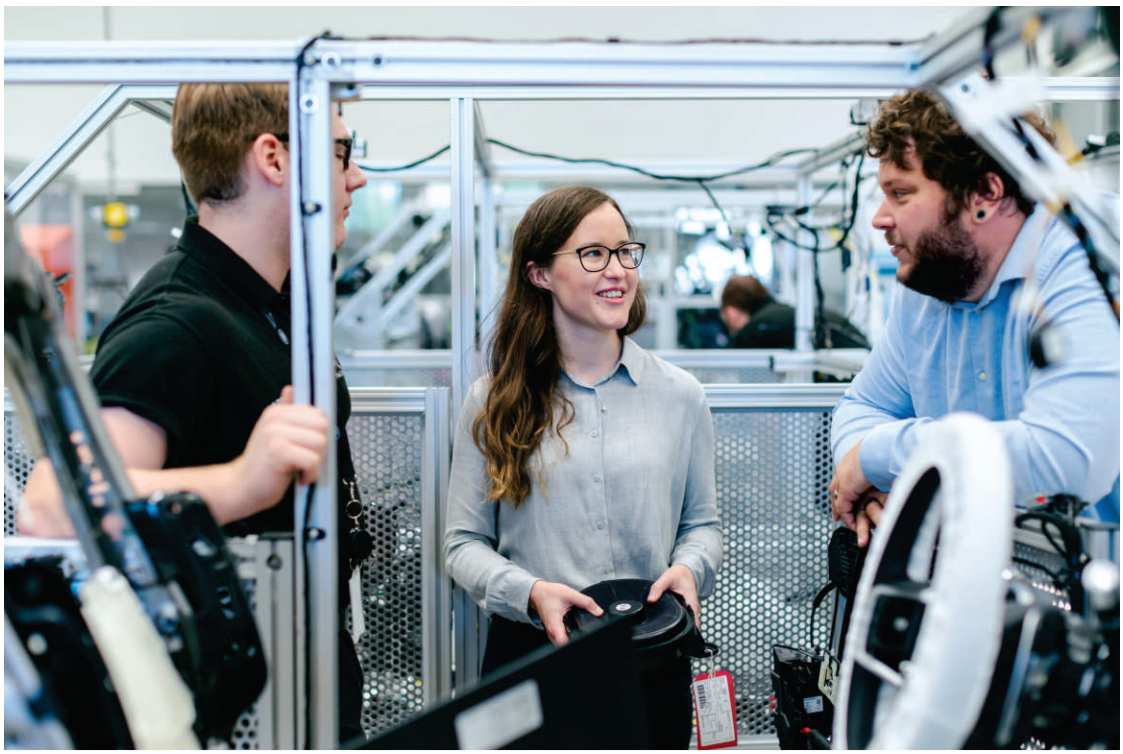
MEM234035 - MAINTAIN AND APPLY TECHNICAL AND ENGINEERING SKILLS



Student Contact Hours
160

Work Placement Hours
85

Unit Descriptor

This unit of competency covers the skills and knowledge required by a Principal Technical Officer, or someone in an equivalent position, to plan and manage their own technical role and development in their field of engineering for the benefit of themselves and their organisation. It covers the technical, analytical, communication and system skills to ensure effective performance in complex technical and engineering environments.

Application of the Unit

This unit applies to Principal Technical Officers and others in equivalent engineering and engineering-related positions in an organisation. The unit covers the skills required for an individual to manage their engineering role and provides the core underpinning skills for an individual to appropriately apply technical skills gained from other units of competency in the MEM80111 Vocational Graduate Diploma of Engineering. This unit applies to an individual performing high level engineering-related work whether in a project management, supervisory or technical specialist role in an organisation. The unit covers skills associated with ensuring that the individual's skills and knowledge in their chosen discipline or area of responsibility are up to date and appropriate for their work.

The unit applies across all forms of manufacturing and engineering. The unit covers high level technical, analytical, communication and system thinking skills.

MEM80122 - GRADUATE DIPLOMA OF ENGINEERING I CRICOS Course Code: 112028A

MSAENV672 - DEVELOP WORKPLACE POLICY AND PROCEDURES FOR ENVIRONMENTAL SUSTAINABILITY

Unit Descriptor

This competency covers the outcomes required to develop and implement a workplace sustainability policy, including the modification of the policy to suit changed circumstances.

This unit is based on the sustainability guideline standard GCSSUS03A Develop workplace policy and procedures for sustainability.

Application of the Unit

This competency applies to team leaders/supervisors/managers who are required to develop approaches to environmental sustainability within workplaces, including the development and implementation of policy.

It includes:

- Communicating with relevant stakeholders
- Developing and monitoring sustainability policies
- Reviewing and improving sustainability policies.

This competency applies to all sectors of the manufacturing industry. It may also be applied to all sections of an organisation, including office, warehouse etc.

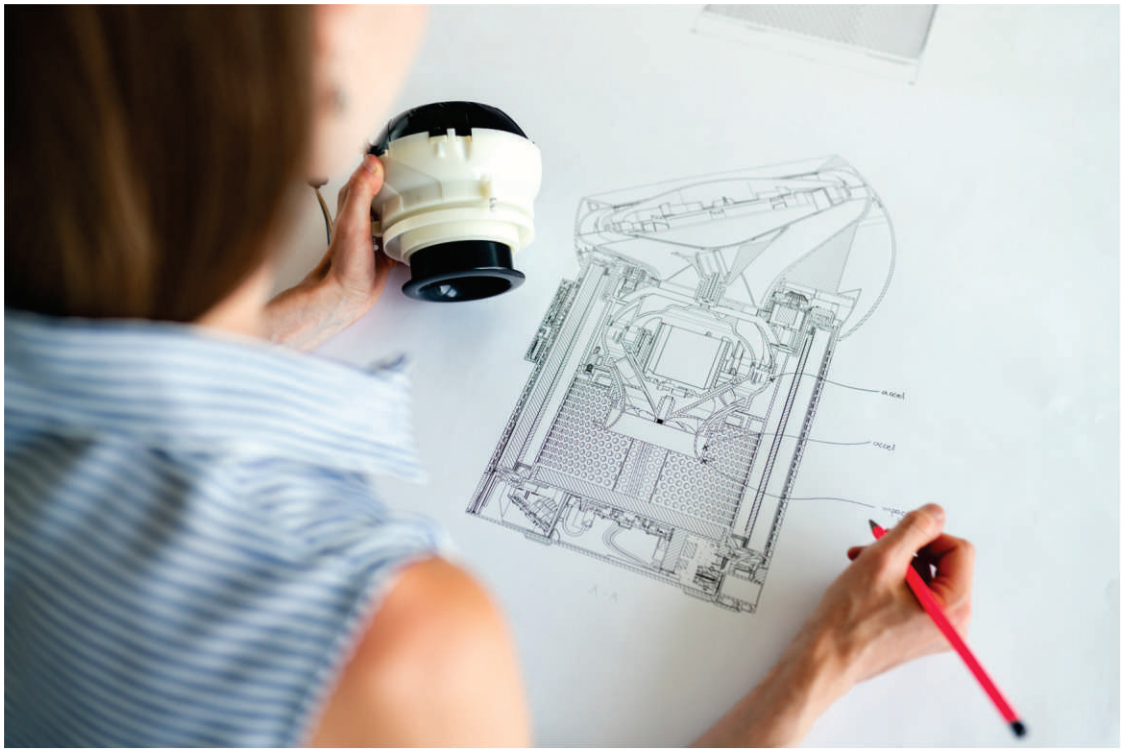
This unit will need to be appropriately contextualised as it is applied across an organisation and across different industry sectors.

Student Contact Hours
120

Work Placement Hours
45

MEM80122 - GRADUATE DIPLOMA OF ENGINEERING I CRICOS Course Code: 112028A

MEM234001 - PLAN AND MANAGE ENGINEERING-RELATED PROJECTS OR OPERATIONS



Student Contact Hours
170

Work Placement Hours
65

Unit Descriptor

This unit of competency covers the skills associated with high level planning and management of engineering-related projects or operations. The unit covers the skills required to plan, establish, maintain and manage complex engineering systems and resources associated with time-defined engineering-related projects or high level engineering operations management in a manufacturing or engineering-related organisation.

Application of the Unit

This unit applies to the planning and management of engineering-related projects or operations. Activities include significant project or operations management responsibilities and may require personal and electronic communication, self-directed and group activities, business planning, project or operations planning and scheduling, and an understanding of the technology, skills and techniques, and quality aspects required by the project or operations.

MEM80122 - GRADUATE DIPLOMA OF ENGINEERING I CRICOS Course Code: 112028A

MEM234021 - APPLY STATISTICS TO TECHNOLOGY PROBLEMS

Student Contact Hours
130

Work Placement Hours
40

Unit Descriptor

This unit of competency covers the application of advanced statistics in an engineering or related application. It includes probability distributions, correlation, inference and significance, and covers both the application of theory in simple calculations and the use of relevant statistical packages for more complex situations.

Application of the Unit

This unit applies to projects or tasks requiring advanced statistical analysis involving probability distributions, correlation, inference and significance, and the use of statistical tables and equations, either manually or through use of an appropriate statistics package. It is suitable for paraprofessionals and technologists required to solve advanced statistical problems in an engineering or related field, or those pursuing technologist careers and qualifications.

Prior or concurrent experience in probability and statistics covering central tendency, measures of variability and confidence limits is required.

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MEM80122 - GRADUATE DIPLOMA OF ENGINEERING I CRICOS Course Code: 112028A

MEM234028 - PRODUCE AND MANAGE TECHNICAL DOCUMENTATION

Unit Descriptor

This unit of competency covers the skills and knowledge required to develop and produce engineering-related technical documentation and to manage documentation distribution and use within an organisation.

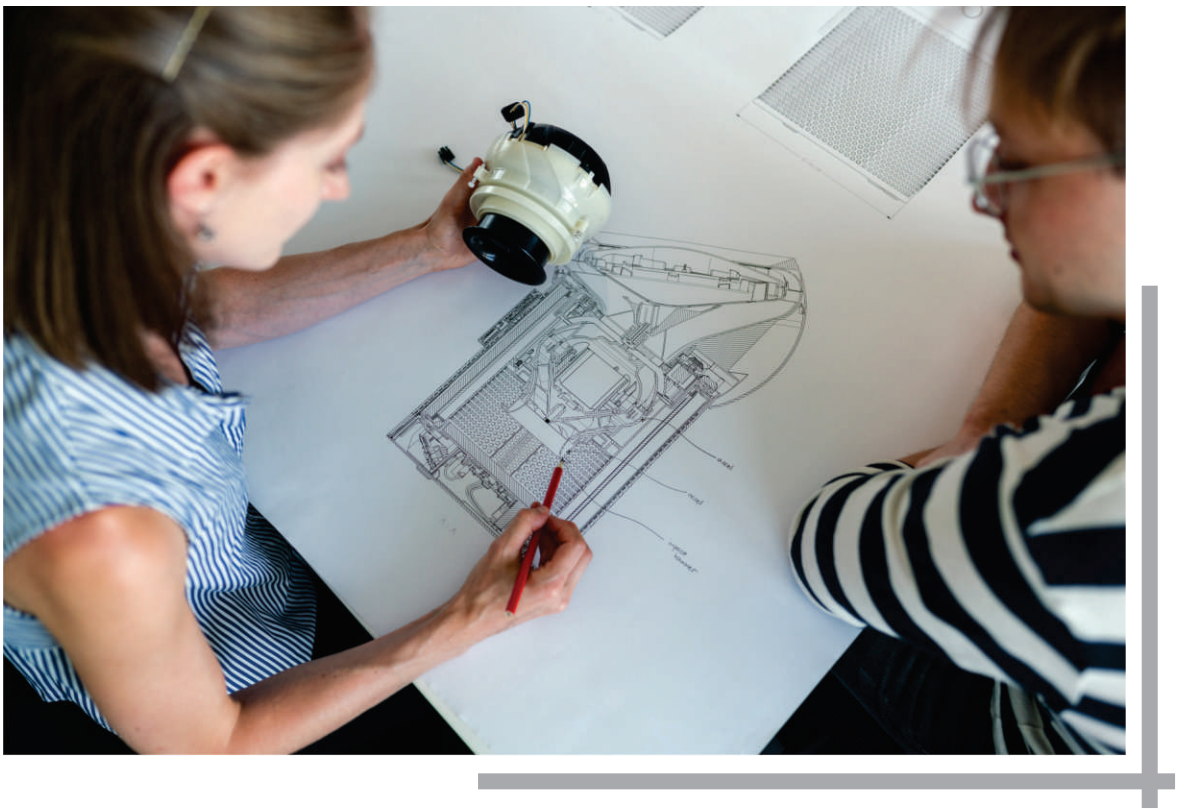
Application of the Unit

This unit applies where engineering skills and knowledge are required for the production and management of technical documentation for use within an organisation and by other users, such as contractors and dealers. Technical documentation may include production control records, work instructions and standard operating procedures, process specifications, occupational health and safety (OHS) procedures, quality procedures, contractor instructions, and documentation required to comply with legislative and regulatory requirements.

Student Contact Hours	Work Placement Hours
140	40

MEM80122 - GRADUATE DIPLOMA OF ENGINEERING I CRICOS Course Code: 112028A

MEM234029 - PRODUCE AND MANAGE TECHNICAL PUBLICATIONS



Student Contact Hours	Work Placement Hours
140	40

Unit Descriptor

This unit of competency covers the skills and knowledge required to develop and produce engineering-related technical publications and to manage publications within the organisation.

Application of the Unit

This unit applies where engineering skills and knowledge are required for the production and management of technical publications for use within the organisation and by downstream users, such as contractors and final customers.

Applications include workshop manuals, operating instructions, parts catalogues, procedures manuals and related technical publications.