

MEM40119 —————

CERTIFICATE IV

IN ENGINEERING

RTO ID : 45356 | CRICOS CODE : 03685G | CRICOS COURSE CODE : 0100617



Qualification:

This course has been designed for International Students and Domestic Students studying in Australia and will provide successful students with a Nationally Recognised Qualification of Certificate IV in Engineering (MEM40119).

Pathways:

Further training pathways from this qualification include MEM50119 Diploma of Engineering - Advanced Trade or other relevant qualifications.

Course Duration

This course has been designed to be delivered over **102 weeks**.

56 Tuition Weeks | **24** Work Placement Weeks | **22** Holiday Weeks

Contact Hours:

Classes are held for 20 student contact hours per week which equates to 1120 student contact hours. This may be achieved with a schedule such as 3 days per week (2 days of 8 hours, and 1 day of 4 hours per week). While the timetable may vary it will always maintain 20 student contact hours per week. Students will be required to undertake 24 weeks of work placement throughout the program. The work placement will be for 32 hours per week (4 days) and students will perform a range of duties in line with the program outcomes. Students will also be required to allocate some time each week to undertake some self-study (e.g. self-directed learning through activity books, case studies, and assignments). Students should be able to allocate approximately 4 hours per week outside of allocated class time. This equates to approximately 224 hours of self-study. Courses are run regularly throughout the year. Please refer to the RTO for exact course dates.

Tuition Fee:

Costs for this program are as follows

Tuition Fee **\$21,000** | Materials Fee **\$3,000** | Admin Fee **\$300**

Total Payable Fees **\$24,300**

(Above tuition fees apply for admission by direct entry. Credit for relevant units of competency achieved should be granted towards this qualification for those who have completed MEM30205/MEM30219 Certificate III in Engineering – Mechanical Trade, MEM30305/MEM30319 Certificate III in Engineering – Fabrication Trade, or other relevant qualifications)

Who can undertake the training?

Students are required to meet the following entry requirements:

- Applicant must be 18 years of age or older
- An IELTS score of 5.5 or PTE Academic Score of 45.4
- (or equivalent English Language Testing Score) is required for International students entering into this program* Applicants might be asked to take an AIE English Placement Test
- Students must successfully complete a LLN test to confirm the ability to effectively undertake the course
- This program has been designed to be delivered through classroom-based delivery and students must have the ability to attend the scheduled sessions as per the timetable and allocate some self-study time.
- Students will be required to have access to a computer (or laptop) with internet connection for self-study purposes.

Note: Exception on English Requirement for international students

Applicant who is a citizen and holds a passport from UK, USA, Canada (excluding French province), NZ or Republic of Ireland, will not be required to present any English evidence as part of application with AIE.

How is the course trained and assessed?

- This program is to be delivered in a classroom-based environment with access to a fully equipped engineering workshop.
- All theory and practical based delivery and assessment will occur within the designated classrooms and engineering workshop of the RTO through structured training sessions from a qualified Trainer / Assessor employed by the RTO. At these training sessions a qualified Trainer/ Assessor will provide the required skills and knowledge as per the unit content and will ensure the learning is imparted.
- In addition students are required to undertake work placement and engage with industry and on-the-job training to enhance their skills and knowledge.
- The course also involves students completing some reading and written work outside the scheduled classroom delivery time.
- The assessment process will include the gathering of evidence to demonstrate the student's competence.
- The assessments include theory and practical tasks and will be clearly documented in the assessment documents. Assessments will include tasks such as written questions, practical demonstrations, case studies and assignments.





How do I enrol?

Your part in the enrolment process is triggered by you completing an Application Form to study with Australian Institute of Engineering. Which Can be filled online on our website.

To apply and enrol in this course with Australian Institute of Engineering you will be required to complete the following steps:

1. Read and understand the information contained in this course brochure and the International Student Information Handbook.
2. Complete the Application Form online to declare that you understand all of the information provided and confirm your interest in the selected course. This will include providing a range of information and documents to support your application.
3. You will then receive a Letter of Offer and Written Agreement confirming your enrolment details which must be signed and returned to confirm your enrolment with Australian Institute of Engineering
4. Undertake a Language, Literacy and Numeracy test at Australian Institute of Engineering prior to your commencement of the course.

Course Structure:

Certificate IV in Engineering (MEM40119) covers the skills and knowledge required for employment as a Higher Engineering Tradesperson or a

Special Class Engineering Tradesperson Level III of :

Mechanical | Fabrication | Electrical/Electronic

within the metal, engineering, manufacturing and associated industries or at equivalent levels in other industries where Engineering Tradespersons work.

Units

Students need to complete **Forty-Two (42)** units of.

competency, consisting of: **12** Core units | **30** Elective units

CORE UNITS

Unit Code	Unit Name
MEM09002*	Interpret technical drawing
MEM11011*	Undertake manual handling
MEM12023*	Perform engineering measurements
MEM12024*	Perform computations
MEM13015	Work safely and effectively in manufacturing and engineering
MEM14006*	Plan work activities
MEM16006*	Organise and communicate information
MEM16008*	Interact with computing technology
MEM17003*	Assist in the provision of on-the-job training
MEM18001*	Use hand tools
MEM18002*	Use power tools/hand held operations
MSMENV272	Participate in environmentally sustainable work

ELECTIVE UNITS (GROUP A)

Unit Code	Unit Name
MEM12025*	Use graphical techniques and perform simple statistical computations
MEM16010*	Write reports
MEM16012*	Interpret technical specifications and manuals
MEM16014*	Report technical information
MEM17001*	Assist in development and deliver training in the workplace
MEM18011*	Shut down and isolate machines/equipment
MEM24012*	Apply metallurgy principles

ELECTIVE UNITS (GROUP B)

Unit Code	Unit Name
MEM05004*	Perform routine oxy gas welding
MEM05005*	Carry out mechanical cutting
MEM05007*	Perform manual heating and thermal cutting
MEM05010*	Apply fabrication, forming and shaping techniques
MEM05011*	Assemble fabricated components
MEM05012*	Perform routine manual metal arc welding
MEM05015*	Weld using manual metal arc welding process
MEM05016*	Perform advanced welding using manual metal arc welding process
MEM05017*	Weld using gas metal arc welding process
MEM05018*	Perform advanced welding using gas metal arc welding process
MEM05019*	Weld using gas tungsten arc welding process
MEM05020*	Perform advanced welding using gas tungsten arc welding process
MEM05037*	Perform geometric development
MEM05047*	Weld using flux core arc welding process
MEM05048*	Perform advanced welding using flux core arc welding process
MEM05049*	Perform routine gas tungsten arc welding
MEM05050*	Perform routine gas metal arc welding
MEM05051*	Select welding processes
MEM05052*	Apply safe welding practices
MEM05056*	Perform routine flux core arc welding
MEM11016*	Order materials
MEM12007*	Mark off/out structural fabrications and shapes
MEM24001*	Perform basic penetrant testing

Please Note:

The above units have listed pre-requisite units that are listed within the Training Package and the AIE Engineering Qualifications Overview. All elective units are included and accounted for within the unit selection and order of delivery.



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