



MEM40105 Certificate IV in Engineering

National ID: MEM40105 | State ID: W245

About this course

The Certificate IV in Engineering specifies the competencies required for employment as a Higher Engineering Tradesperson or a Special Class Engineering Tradesperson - Level II in mechanical, electrical/electronic or fabrication trade disciplines. The job role involves application of additional skills in the learner's trade or cross skills from other trades. Job roles may include the design, assembly, manufacture, installation, modification, testing, fault finding, commissioning, maintenance and service of equipment and machinery, the fabrication of structures and assemblies, manufacture of sheet metal work, as well as use of relevant machinery, equipment and joining techniques. Machinery and equipment can include fluid power systems, stationary and mobile equipment, instruments, refrigeration, and the use of computer controlled machine tools.

Overview

This course will be offered with a blended, flexible delivery model to enable social distancing measures to be undertaken during the COVID-19 pandemic. This approach may include a mix of online and classroom based delivery, as well as practical and work experience placements. Lecturers will provide specific instructions to their student groups on how training will be undertaken.

All year round, 2020

Rockingham - Part Time-Self Paced



When: **All year round**



How: **Part Time
Self Paced**

Units

Core

National ID	Unit Title
MEM12023A	Perform engineering measurements
MEM12024A	Perform computations
MEM13014A	Apply principles of occupational health and safety in the work environment
MEM14004A	Plan to undertake a routine task
MEM14005A	Plan a complete activity
MEM15002A	Apply quality systems
MEM15024A	Apply quality procedures
MEM16006A	Organise and communicate information
MEM16007A	Work with others in a manufacturing, engineering or related environment
MEM16008A	Interact with computing technology
MEM17003A	Assist in the provision of on the job training
MSAENV272B	Participate in environmentally sustainable work practices

Elective

National ID	Unit Title
MEM05007C	Perform manual heating and thermal cutting
MEM05012C	Perform routine manual metal arc welding
MEM05017D	Weld using gas metal arc welding process
MEM05019D	Weld using gas tungsten arc welding process
MEM05049B	Perform routine gas tungsten arc welding
MEM05050B	Perform routine gas metal arc welding
MEM05051A	Select welding processes
MEM05052A	Apply safe welding practices
MEM06007B	Perform basic incidental heat/quenching, tempering and annealing
MEM07005C	Perform general machining
MEM07006C	Perform lathe operations
MEM09002B	Interpret technical drawing
MEM09003B	Prepare basic engineering drawing
MEM12006C	Mark off/out (general engineering)
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operations
MEM18003C	Use tools for precision work
MEM18004B	Maintain and overhaul mechanical equipment
MEM18005B	Perform fault diagnosis, installation and removal of bearings
MEM18006C	Repair and fit engineering components

National ID	Unit Title
MEM18007B	Maintain and repair mechanical drives and mechanical transmission assemblies
MEM18009B	Perform levelling and alignment of machines and engineering components
MEM18010C	Perform equipment condition monitoring and recording
MEM18012B	Perform installation and removal of mechanical seals
MEM18013B	Perform gland packing
MEM18018C	Maintain pneumatic system components
MEM18019B	Maintain pneumatic systems
MEM18020B	Maintain hydraulic system components
MEM18021B	Maintain hydraulic systems
MEM18055B	Dismantle, replace and assemble engineering components

Entrance requirements

School Leaver	Non-School Leaver	AQF
C Grades in Year 11 WACE General English, and OLNA or NAPLAN 9 Band 8	C Grades in Year 11 English and Maths or equivalent	Certificate II or Certificate III

Study pathway

This qualification will allow you to undertake post trade studies in a range of specialisations to enhance your trade specialization, or to move into another specialisation. The opportunity for specialising technically or moving into a more technical supervisor position is available with further flexibility at the Diploma level.

Job opportunities

This qualification is designed to reflect the role of team leaders and supervisors in the industry sector.

Fees and charges

Indicative fees and charges

[2020 general admission fees list](#)

[2020 apprenticeship/traineeship fees list](#)

Fees and charges published on our website are indicative. Your fees will depend on your eligibility for government funding or a concession rate, and the units you choose to study or seek to be recognised under Recognition of Prior Learning (RPL). Our Indicative fees lists show fees that are:

- Based on the full possible study plan of units, including the recommended electives
- Based on full time study in 2020
- Charged at the government funded rate for over 18 years of age students
- Based on unit electives designed to meet localised industry demand for skills
- Made up of course fees and resource fees, or RPL fees. Course fees are the cost of your tuition, while resource fees pay for consumables provided to you to aid your study (such as printing and paper). You may also be required to purchase text books or equipment that are not part of our tuition or resource fees.

Fees may vary between students and between educational providers. Other charges may apply.

Visit our [Fees and payment options](#) page for more information.

Call 1800 001 001 to get a more accurate fee indication based on your eligibility and study plan before applying.

VET Student Loans

Selected courses are VET Student Loan eligible courses.

A VET Student Loan creates a debt that must be repaid to the Commonwealth and is only available to students who are eligible.

To find out if you are eligible or to see the list of eligible courses visit our [Student Loans](#) page.

International students

Selected courses are available to International students for full time study only.

Fees, charges, available locations, applications and enrolment procedures for International students are different to those for students who have Australian permanent residency.

For more information or to find a course visit the [TAFE International WA](#) website.

Apprenticeships and traineeships

Fees for apprenticeships and traineeships are charged at a rate per nominal hour of study.

This means that your fees will vary depending on the units you study as part of your training plan.

Apprentices and trainees are liable to pay for their own fees but some industrial agreements (awards) dictate that employers are required to reimburse their apprentice upon receipt of satisfactory progress. An employer may also opt to pay on behalf of the apprentice or trainee.

For more information visit our [Apprenticeships and traineeships](#) page.

Recognition of Prior Learning

Recognition of Prior Learning (RPL) enrolments are charged at \$3.25 per nominal hour of study.

No concession fees apply to RPL enrolments. Refer to the institutional or apprenticeship/traineeship fee lists for an indicative RPL course fee.

Please note, fees are subject to change.