

## MEM50119

### Diploma of Engineering – Advanced Trade (Diesel / Mechanical Fitting)



#### DURATION

18 months  
2 days a week  
over 3 semesters



#### DELIVERY MODEL

Face-to-Face  
at ASG  
Brendale

#### Course Overview

This qualification provides the skills and knowledge required for employment as an advanced engineering tradesperson within the metal, engineering, manufacturing & associated industries as a Mechanical Fitter and/or Diesel Fitter. Very practical in approach it allows for the development of key skills over time through the completion of job tasks in a simulated environment. It also includes an Industry Placement component for skills consolidation in the workplace.

#### ASG Entry Requirements

Minimum age: 18 years  
Academic suitability:

- Australian Year 12 Certificate; or
- An AQF Certificate IV level qualification or higher; (or its equivalent; or overseas qualification assessed as equivalent by an approved authority)
- Successful completion of LLN assessment at ACSF Exit Level 3 or higher.
- International Baccalaureate (IB) diploma

You also need to supply your own PPE - steel cap boots, long pants & high-viz shirt.

#### Qualification Pathway

MEM80122 Graduate Diploma of Engineering

#### Employment Opportunities

On successful course completion students will be dual trade qualified as a Mechanical Engineering tradesperson, equipped to obtain employment as a:

- Diesel Fitter
- Maintenance / Mechanical Fitter

#### Tuition Fees:

**Total Course Cost - \$19,738 \***

(payable in 3 instalments, 1 in each semester)

You have the option to pay your fees as they become due &/or using a VET Student Loan. Eligibility criteria applies.\*

\*The maximum amount of VSL that applies to this course is **\$18,838**; so if using a VET Student Loan there is a **Gap Fee of \$900**.

#### Student Services

We offer a range of support services to assist you in achieving a successful course outcome. This includes tutorial support and Language, Literacy & Numeracy assistance where required. Please contact us to discuss any other individual needs.

#### Assessment

Assessment takes place at the end of each unit with a Knowledge Test and Practical Demonstration & throughout the course with a holistic project due at the end of each semester.

#### Certification

On successful course completion Australian Skills Group will award the MEM50119 Diploma of Engineering – Advanced Trade, or a Statement of Attainment for units achieved in partial completion.

### VET Student Loans

- **Vet Student Loans** is an Australian Government loan program that helps eligible individuals pay their tuition fees
- **Eligibility criteria applies** – a VSL will not be approved for students who do not meet eligibility requirements
- **For more information refer to the VET Student Loans Information Booklet:**

[VET Student Loans Information Booklet - Department of Employment and Workplace Relations, Australian Government \(dewr.gov.au\)](http://www.dewr.gov.au)

## Qualification Pathway

### Semester 1

MEM13015 Work safely and effectively in manufacturing and engineering  
MEM16006 Organise and communicate information  
MEM11011 Undertake manual handling  
MEM12023 Perform engineering measurements  
MEM12024 Perform computations  
MEM18001 Use hand tools  
MEM18002 Use power tools/hand held operations  
MEM14006 Plan work activities  
MEM16011 Communicate with individuals and small groups  
MEM09002 Interpret technical drawing  
MEM18003 Use tools for precision work  
MEM18055 Dismantle, replace and assemble engineering components  
MEM18006 Perform precision fitting of engineering components  
MEM05007 Perform manual heating and thermal cutting  
MEM05006 Perform brazing and/or silver soldering

### Semester 2

MEM16012 Interpret technical specifications and manuals  
MEM16009 Research and analyse engineering information  
MEM16014 Report technical information  
MEM12025 Use graphical techniques and perform simple statistical computations  
MEM16008 Interact with computing technology  
MEM12026 Perform advanced trade calculations in a manufacturing, engineering or related environment  
MEM18011 Shutdown and isolate machines and equipment  
MEM18012 Perform installation and removal of mechanical seals  
MEM18005 Perform fault diagnosis, installation and removal of bearings  
MEM18007 Maintain and repair mechanical drives and mechanical transmission assemblies  
MEM18009 Perform precision levelling and alignment of machines and engineering components  
MEM12003 Perform precision mechanical measurement  
MEM12004 Perform precision electrical/electronic measurement  
MEM18010 Perform equipment condition monitoring and recording  
MEM18018 Maintain pneumatic system components  
MEM18020 Maintain hydraulic system components  
MEM18021 Maintain hydraulic systems

### Semester 3

MEM27002 Test and repair compression ignition systems  
MEM27004 Maintain and repair engine lubrication systems  
MEM27005 Tune diesel engines  
MEM27006 Diagnose and rectify batteries, low voltage sensors and circuits  
MEM27007 Diagnose and rectify low voltage starting systems  
MEM27010 Diagnose and rectify low voltage charging systems  
MEM27013 Maintain steering system  
MEM27012 Maintain mobile plant suspension systems  
MEM27008 Maintain induction, exhaust and emission control systems  
MEM27015 Diagnose and rectify drive line and final drives  
MEM27009 Diagnose and rectify braking systems  
MEM18022 Maintain fluid power controls  
MSMENV272 Participate in environmentally sustainable work practices  
MEM17003 Assist in the provision of on-the-job training