AUSTRALIAN SKILLS GROUP



MEM50119

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

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 o 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

DURATION



DELIVERY MODEL

Face-to-Face at Brendale

18 months 2 days a week over 3 semesters

Tuition Fees:

Total Course Cost - \$ 18,997

(payable in installments, across 3 semesters)

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.

Course Structure 3 Semesters

Unit of Study 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

MEM09002 Interpret technical drawing

MEM16008 Interact with computing technology

MEM16011 Communicate with individuals and small groups MEM16012 Interpret technical specifications and manuals

MEM16009 Research and analyse engineering information

MEM12026 Perform advanced trade calculations in a manufacturing, engineering or related environment

MEM05006 Perform brazing and/or silver soldering

MEM16014 Report technical information

MEM12025 Use graphical techniques and perform simple statistical computations

Unit of Study 2

MEM18003 Use tools for precision work

MEM18055 Dismantle, replace and assemble engineering components

MEM18006 Perform precision fitting of engineering components

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 MEM05007 Perform manual heating and thermal cutting

Unit of Study 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

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

MEM17003 Assist in the provision of on-the-job training



