MECHANICAL FITTER

EDUCATIONAL PATHWAYS

Entry Level

Employers require applicants who have completed at least Year 10 but most prefer applicants who have successfully completed Years 11 & 12. By completing a Pre-Apprenticeship course while at school you'll boost your ability to get a full mechanical fitting or machinist apprenticeship in industries such as rail transport infrastructure and maintenance, mining, automotive, or hydraulics.

MEM20105 - Certificate II in Engineering - pre-apprenticeship

This qualification covers the skills and knowledge required of workers employed as Engineering/manufacturing Employees -Level III as defined in the Manufacturing and Associated Industries and Occupations Award or in related industries where Engineering/ Manufacturing Employees work. The qualification has been specifically developed to reflect the minimum training requirement specified in the Award for employment in the above occupation.

MEM30219 - Certificate III in Engineering - Mechanical Trade

This qualification defines the skills and knowledge required of an engineering tradesperson – mechanical within metal, engineering, manufacturing and associated industries. The qualification has been specifically developed for apprentices in the above trade. This qualification must be undertaken through a Training Contract or through formal trade recognition assessment processes. The skills associated with this qualification are intended to apply to a wide range of mechanical trade work, including undertaking fitting, assembly, manufacture, installation, modification, testing, fault finding, maintenance and service of mechanical equipment, machinery and the use of machine tools. Components of this qualification's assessment must be completed in the workplace.

MEM31419 - Certificate III in Engineering - Fixed and Mobile Plant Mechanic

You may also consider completing this qualification to increase your skills and knowledge:

This qualification defines the skills and knowledge required of an engineering tradesperson - mechanical specialising in diesel fitting and plant mechanics within metal, engineering, manufacturing and associated industries. The qualification has been specifically developed for apprentices in the above trade. This qualification must be undertaken through a Training Contract or through formal trade recognition assessment processes. The skills associated with this qualification are intended to apply to a wide range of trade work including manufacturing, assembly and commissioning of mobile and stationary plant, servicing, diagnosis and rectification of faults, condition monitoring, and preventative maintenance. This qualification is designed to provide an industry recognised skills profile related to trade work as a fixed and/or mobile plant mechanic.

MEM40119 - Certificate IV in Engineering

This qualification defines the skills and knowledge required for a higher engineering tradesperson within metal, engineering, manufacturing and associated industries. The skills associated with this qualification are intended to apply to a wide range of engineering work undertaken in the fields of refrigeration and air conditioning, casting and moulding, computer numerically controlled (CNC) programming, fluid power, heavy fabrication, instrumentation, maintenance, plant mechanics, marine electronics, mechatronics, patternmaking, robotics, toolmaking, welding and watch and clock services and repair, including post-trade work. It provides the skills and knowledge for a person to understand and implement quality control techniques, exercise good interpersonal and communications skills, work from complex instructions and procedures, exercise discretion within the scope of responsibility, perform work under limited supervision either individually or in a team environment, be responsible for assuring the quality of their own work, provide trade guidance and assistance as part of a work team, perform non-trade tasks which are incidental or peripheral to the primary tasks and facilitate the completion of the whole task, inspect products and/or materials for conformity with established operational standards, operate lifting equipment incidental to their work and assists in the provision of training in conjunction with supervisors and trainers.

MEM50119 - Diploma of Engineering - Advanced Trade

This qualification defines the skills and knowledge required for employment as an Advanced Engineering Tradesperson - Level II within the metal, engineering, manufacturing and associated industries or at equivalent levels in other industries where engineering tradespersons work. The qualification has been specifically developed to meet the needs of apprentices in an engineering trade who choose to study at a higher level during their apprenticeship, or for people who are existing engineering tradespersons. It provides the skills and knowledge for a person to undertake quality control, exercise good interpersonal and communications skills, work from complex instructions and procedures, provide technical guidance or assistance within the scope of responsibility, prepare reports of a technical nature on specific tasks or assignments, exercise broad discretion within the scope of responsibility, perform work under limited supervision either individually or in a team environment, be responsible for assuring the quality of their own work, provide trade guidance and assistance as part of a work team, perform non-trade tasks which are incidental or peripheral to the primary tasks and facilitate the completion of the whole task, inspect products and/or materials for conformity with established operational standards, operate lifting equipment incidental to their work and assists in the provision of training in conjunction with supervisors











MECHANICAL FITTER

CAREER PATHWAYS/SPECIALISATIONS

There are a diverse range of job opportunities for mechanical fitters some of which are listed below –

Diesel Fitter-Mechanic

A Diesel Fitter is a mechanic who specialises in the repair and maintenance of diesel engines and associated equipment and components, often involving heavy vehicles or industrial machinery. They inspect engine systems, equipment and components, diagnose and repair faults, perform tests and routine maintenance and servicing, overhaul engine systems, and dismantle and reassemble engine systems and associated components. They may also work on mechanical/pneumatic systems, mobile plant and other associated equipment alongside the varied trades people and trade assistants in a workshop or field environment.

Plant Mechanic

Plant mechanics repair and maintain industrial, agricultural, construction and mining equipment. Plant mechanics use a range of tools to diagnose and test the faults in plant machinery and determine what repairs or modifications need to be made. They may work on mechanical/pneumatic systems, mobile plant and other associated equipment in a workshop or field environment.

Fitter-Machinist

Fitter-Machinists fit, assemble, fabricate or machine parts into products. They set up and operate machines and tool apparatuses to create specific products, parts, devices or tools by turning, boring, milling, planning, threading, bending, shaping, slotting, grinding or drilling stock, castings, items or objects to fine tolerances. It may also include the use of print, die, press, extrusion, product or textile machines. They select and use a range of machining, cutting, grinding, bending, threading, planning, boring and drilling tools, interpret detailed drawings and specifications to create requisitioned products, and may be required to set-up, program and operate a range of advanced manufacturing computer aided software and machines such as Computer Numerically Controlled (CNC), Computer Aided Design (CAD), Computer Integrated Manufacturing (CIM), Computer Aided Manufacturing (CAM) machines.

Pipefitters

Pipefitters are tradespeople who work with pipes that contain and transport substances for hydraulic systems and industrial pipe infrastructure. They typically work for industrial environments that use heavy-duty piping like refineries, factories and energy plants. The systems pipefitters create can carry a range of substances, from water and steam to fuel and volatile chemicals.

Pump and Watering Fitter

These tradespeople will specialise in machining, piping/ equipment installation, centrifugal and air diaphragm pump overhauls, dry break coupling overhauls, mechanical seal overhauls, valve/ gearbox overhauls, pump alignment, PVC piping, welding. Often these tradies work in industries that use gas, chemicals, fluids, or water as part of the manufacturing process.

Mining Industry

A mechanical fitter working in the mines may be responsible for attending to breakdowns and performing preventative maintenance of gyratory, jaw and cone crushers conveyer maintenance and pump rebuilds. They may also need to operate and maintain machinery such as Loaders, Skid Steers and Telehandlers.

Mechanical Fitter in the Navy

As a Mechanical Fitter in the Navy you will be carrying out fitting of brand-new equipment as well as repairing of parts, fault finding and working as a team to produce efficient and safe outcomes in all circumstances. You will undertake removal and installation of mechanical equipment onboard Royal Australian Navy ships. You will gain experience of understanding technical documents and standard operating procedures along with the ability to work unsupervised to a high standard.

For further information or advise contact







MECHANICAL FITTER

CAREER PATHWAYS INDUSTRY LINKS

For further information relating to this job click on the industry icon or scan the QR code to access more details.





Australian Industry Group AiGroup



Australian Chamber of Commerce & Industry (ACCI)









Engineers Australia



AAP Manufacturing



The Australian Manufacturing Technology Institute Limited









Australian Defence Force Jobs -Fitter and Turner



Your Career Fitter & machinist / general fitter

MAE







MECHANICAL FITTER

HINTS ON HOW TO APPLY FOR THIS JOB

The 11 steps below outline the process you could follow to assist you to secure an apprenticeship as a mechanical fitter -

Step 1. identify your strengths and weaknesses, especially in maths and literacy as these are essential to being successful in a mechanical fitter career. Intermediate maths with a solid pass mark is the minimum. Additionally, subjects like technical drawing and metalwork, woodwork or engineering will give you some basic hand spatial and situational awareness skills that employers look for.

Step 2. decide where you want to work; are you willing to relocate to get your dream job? There may be more opportunities in cities than in regional areas.

Step 3. do some research, as to who the key employers are in this industry and choose the area of specialisation that you most like then make enquiries to see if they will take on apprentices.

Step 4. research information about these employers or companies that you would like to work for; find out what the entry requirements or essential criteria are that must be met; such as do you need to complete an aptitude or other entry test before getting an interview?

Step 5. make a shortlist of potential prospective employers to contact. You may also like to chat to your job search agent or search some of the online employment agencies such as SEEK, Jobsearch, Indeed or LinkedIn to find job vacancies for aircraft maintenance personnel in your region.

Step 6. create a quality resume by identifying key elements that should be included therein, and incorporate your academic achievements, experience, interests and passions.

Step 7. identify and practice some interview skills with friends, parents or career advisors to learn tips on how best to perform in an interview.

Step 8. contact potential employers by writing or directly calling them to demonstrate your interest and communication skills. Prospective employers highly value self-starters and prospective career aspirants with initiative who take such steps to seek for themselves employment as an apprentice.

Step 9. talk with the prospective employer about the work they do and if they would be interested in taking you on as an apprentice. If you are still at school, you may be able to take up a school-based apprenticeship. There are opportunities available in some schools that allow you to take on a part-time apprenticeship known as a School-Based Apprenticeship or Traineeship (SBAT). Ask your school if they support this government initiative and ask the employer if they would be interested in such an arrangement. SBATs are a really good way to allow you to finish school and at the same time learn and earn as an apprentice.

Step 10. Your employer should contact the Australian Apprenticeship Support Network (AASNs) - https://www.australianapprenticeships.gov.au/ for further information on how to sign you up.

Step 11. sign up to your apprenticeship with your employer (and support of your family if you are under 18 years old) to start "learning and earning" to be a mechanical fitter.

For further information or advise contact











MECHANICAL FITTER

HAVE YOU CONSISDERED THESE RELATED JOBS?

- ⇒ Aircraft Maintenance Technician
- ⇒ Aircraft Maintenance Engineer
- **⇒ Laboratory Technician**
- ⇒ Engineering Production Worker
- ⇒ Metal Fabricator
- **⇒** Quality Assurance officer



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