

AIRCRAFT MAINTENANCE ENGINEER (MECHANICAL)

ALSO KNOWN AS: **AIRCRAFT TECHNICIAN** **AVIATION MAINTENANCE TECHNICIAN** **AIRFRAME AND POWERPLANT MECHANIC**

SOAR TO NEW HEIGHTS IN A CAREER THAT KEEPS THE SKIES SAFE.

As an Aircraft Maintenance Engineer (Mechanical), you'll be the guardian of flight, ensuring that every bolt, engine, and system is in perfect harmony. Your expertise will be the invisible force that propels aircraft from the ground into the clouds, making you an indispensable part of the aviation industry.

KEY SKILLS

Skills which may benefit anyone considering a job as a aircraft maintenance engineer (mechanical) include:

- ☑ Diagnostic acumen
- ☑ Precision
- ☑ Technical documentation comprehension
- ☑ Mechanical aptitude
- ☑ Safety conscious

CAREER PROGRESSION

In this role, you may have the opportunity to progress to other positions. Career progression opportunities include:

- Aerospace Engineer
- Team Leader
- Mechanical Engineer
- Chief Engineering Officer

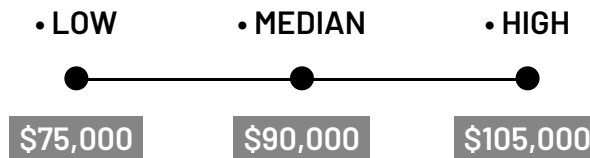
VALUES & ATTRIBUTES

Values and attributes of anyone considering a job as a aircraft maintenance engineer (mechanical) include:

- ☑ Meticulous
- ☑ Adaptable
- ☑ Analytical
- ☑ Responsible
- ☑ Collaborative
- ☑ Realistic - "Do-er"

SALARY EXPECTATION

The expected salary for a Sales Assistant can vary across different areas of manufacturing and may vary as you become more experienced.



RELATED INDUSTRIES

▶ Aerospace and Defence ▶ Transport Equipment and Machinery

RECOMMENDED SCHOOL SUBJECTS

- Aerospace Systems
- Engineering Skills

CORE SCHOOL SUBJECTS

- General Mathematics
- Essential English
- Engineering
- Physics

JOB OVERVIEW

Aircraft Maintenance Engineers (Mechanical) play a crucial role in the aviation industry, responsible for the maintenance, repair, and overhaul of aircraft mechanical systems. Their work ensures the safety and airworthiness of aircraft, directly impacting the lives of passengers and crew members who rely on their expertise.

These skilled professionals contribute significantly to the economy by maintaining the efficiency and reliability of air transportation. They work with a wide range of tools and equipment, from basic hand tools to complex diagnostic systems, requiring a blend of traditional mechanical skills and cutting-edge technological knowledge.

A typical day for an Aircraft Maintenance Engineer (Mechanical) might involve conducting pre-flight checks, troubleshooting reported issues, performing scheduled maintenance, and updating maintenance logs. They must possess strong problem-solving skills, attention to detail, and the ability to work under pressure, often in time-sensitive situations.

WHAT WILL YOU DO?

Your role may include duties as follows:

1. Ensure aircraft operate safely and efficiently through timely maintenance and as required-repair work.
2. Assess and record aircraft systems' functionality and compliance.
3. Keep pace with aircraft regulations to ensure improvements and modifications reflect aviation standards.
4. Plan and manufacture new or updated mechanical systems reflecting safety and performance requirements.
5. Work closely with compliance and technical teams and aeronautical engineers to ensure safe work and technical outcomes.

HOW TO BECOME A AIRCRAFT MAINTENANCE ENGINEER (MECHANICAL)

Becoming an Aircraft Maintenance Engineer (Mechanical) typically requires formal qualifications and licensing. Here's a general pathway to enter this profession:

1. Complete Year 12 with a focus on mathematics, physics, and English
2. Consider undertaking a Certificate II in Aeroskills (MEA20418) which provides good foundation skills
3. Research potential employers in the aviation industry, including airlines, maintenance repair and overhaul (MRO) facilities, and aircraft manufacturers
4. Prepare a strong resume highlighting your qualifications and any relevant experience, and apply for entry-level positions or apprenticeships in aircraft maintenance
5. Gain practical experience through an apprenticeship or traineeship with an approved maintenance organisation
6. Obtain a Civil Aviation Safety Authority (CASA) Aircraft Maintenance Engineer License
7. Consider specialising in specific aircraft types or systems through additional training and certifications

VOCATIONAL EDUCATION & TRAINING

Vocational education and training are essential for aspiring Aircraft Maintenance Engineers (Mechanical). An apprenticeship with is the best pathway to gain employment in this role.

- Certificate IV in Aeroskills (Mechanical)(MEA40718)

As an apprentice you will combine work with formal training, allowing you to gain practical skills and knowledge in a specific trade while earning a salary.

Duration: Apprenticeships typically last up to 3 years for full-time participants. Part-time apprenticeships may take longer, depending on the individual's work schedule and training progress.

Work and study combination: As an apprentice, you will work either full-time or part-time while receiving formal training from a Registered Training Organisation (RTO). School-based apprenticeships may be available.

Eligibility: Generally, apprenticeships do not require any formal qualifications to enter, making them accessible to a wide range of individuals, including if you are a school leaver or someone looking to change careers. There are minimum age requirements and there may be other eligibility criteria.

Completion: On completion you will receive a nationally recognised trade qualification, showcasing your skill and experience.

Advancing your career

For those looking to advance into leadership roles or deepen their expertise:

- Diploma of Aeroskills (Mechanical)(MEA50219)
- Diploma of Aviation Maintenance Management (MEA50422)
- Advanced Diploma of Aviation Maintenance Management (MEA60222)

UNIVERSITY & HIGHER EDUCATION

While not always required, university education can provide advanced knowledge and open opportunities for career progression. Relevant degree programs might include:

- Bachelor of Engineering specialising in aerospace or aviation
- Bachelor of Aviation (Maintenance Management)

For this role, the pathway to university often involves completing a vocational qualification and gaining industry experience before pursuing higher education. University programs offer in-depth understanding of aerospace engineering principles, project management, and research methodologies. These skills can be valuable for those aiming for senior technical or management positions in the aviation industry.