



Careers in manufacturing: aeroskills

Aircraft maintenance engineering

Aircraft maintenance engineers maintain and repair aircraft structures, and avionics and mechanical systems.

Tasks include:

- dismantling, inspecting, testing, troubleshooting, repairing and reassembling aircraft engines, ancillary motors and engine accessories, electrical systems, and subassemblies of aircraft frames
- installing electrical circuits and equipment
- testing aircraft communication equipment, aircraft instrumentation and electronic systems using electronic testing equipment and specialised test apparatus
- replacing and testing aircraft oxygen system components
- assembling parts and subassemblies of aircraft frames
- conducting routine pre-flight inspections of engines, aircraft frames and mechanical systems
- maintaining records of action taken
- manufacturing aircraft electrical, instrument and radio hardware components.

Aircraft maintenance engineer (avionics)

Aircraft maintenance engineers (avionics) maintain, repair, overhaul, modify and test electrical, electronic, instrument and radio systems-components, as well as other aircraft electrical and electronic components and accessories, while such systems-components are still on-aircraft or in a workshop environment after they have been removed from the aircraft. These systems-components include generator and power-distribution systems, protection systems, autopilot and integrated flight systems, environmental control systems, and radar and communication systems.

Specialisations:

- Aircraft maintenance engineer (avionics) – working across electrical/electronics, instrumentation and radio areas
- Avionics technician (Defence)
- Licensed aircraft maintenance engineer (B2) - working across electrical/electronics, instrumentation and radio areas

Relevant qualifications:

- Certificate IV in Aeroskills (Avionics)
- Diploma of Aeroskills (Avionics)

Aircraft maintenance engineer (mechanical)

Aircraft maintenance engineers (mechanical) maintain, repair, overhaul, modify, test and troubleshoot airframe and engine systems and components, either while such systems-components are still on-aircraft or in a workshop environment after they have been removed from the aircraft.

These systems-components include landing gear, wheels and brakes, pressurisation, pneumatic and hydraulic devices, environmental control systems, fire detection and prevention systems, undercarriage, and ice and rain protection systems.

Specialisations:

- Aircraft maintenance engineer (mechanical) – working across airframes and engines areas
- Aircraft technician (Air Force, Army)
- Aviation technician aircraft (Navy)
- Licensed aircraft maintenance engineer (B1) - working across airframes and engines areas

Relevant qualifications:

- Certificate IV in Aeroskills (Mechanical)
- Diploma of Aeroskills (Mechanical)

Aircraft maintenance engineer (structures)

Aircraft maintenance engineers (structures) inspect, fabricate, maintain and repair sheet metal, bonded and non-metallic composite material and components on aircraft, including the framework and internal ribs and the aircraft fuselage, wings and engine cowlings. They must be familiar with airframe, engine and electrical components. They carry out a wide variety of metal forming and joining processes using hand and power tools, and work with high tech fibre-reinforced composites and materials of many types.

Specialisations:

- Aircraft structural fitter (Air Force, Army)

Relevant qualification:

- Certificate IV in Aeroskills (Structures)

