

JOB DESCRIPTION

Aircraft and avionics equipment mechanics and technicians install, test, adjust, and repair equipment and systems in aircraft.

Aircraft Maintenance Technicians perform essential repairs and scheduled maintenance on planes. Typical daily tasks include:

- Diagnosing mechanical or electrical problems
- Inspecting aircraft components and replacement parts
- Troubleshooting mechanical issues
- Replacing faulty parts
- Keeping records of maintenance and repair work
- Following strict safety protocols

Avionics Technicians work on aircraft electrical systems, navigation equipment, and communication devices. Typical tasks include:

- Troubleshooting and diagnosing issues with electronic equipment
- Installing new avionics systems or upgrading existing ones
- Interpreting flight test data to diagnose malfunctions and performance problems
- Repairing or replacing faulty components
- Assembling components, such as electrical controls and junction boxes, and installing software
- Installing instrument panels, using hand tools, power tools, and soldering irons
- Keeping records of maintenance and repair work
- Following strict safety protocols

EDUCATION/TRAINING

Aircraft and avionics equipment mechanics and technicians typically need postsecondary education, such as a certificate from a [Federal Aviation Administration \(FAA\)](#)-approved program. Some earn an associate's degree; others have a high school diploma and train on the job or in the military. Workers typically are certified by the FAA. The FAA requires aircraft maintenance to be done either by a certified mechanic with the appropriate ratings or authorizations or by someone working under the supervision of such a mechanic. The FAA offers separate certificates for bodywork (airframe mechanics) and engine work (powerplant mechanics), but employers may prefer to hire mechanics who have both ratings (A&P). The FAA requirements for eligibility for an airman's mechanic certificate include the following:

- Be 18 or older
- Be able to read, speak, and understand English
- Meet the experience or educational requirement

Once these criteria are met, a series of exams is completed to confirm the level of your knowledge.

PAY

\$79,140 per year (\$38.05 per hour) as of May 2024

JOB OUTLOOK

5% (Faster than average) 2024-2034

IMPORTANT SKILLS

- Detail-oriented. Mechanics and technicians must adjust aircraft parts to exact specifications.
- Dexterity is needed to grasp, manipulate, or assemble parts.
- Mechanical skills. Mechanics and technicians need to understand and interpret manufacturer instructions to repair, replace, and assemble aircraft components.
- Observational skills. Mechanics and technicians must recognize engine noises, read gauges, and collect information to accurately determine whether an aircraft's systems are working properly.
- Physical strength is needed to carry or move heavy equipment or aircraft parts, climb on airplanes, balance, and reach without falling.
- Problem-solving skills are needed to diagnose problems with aircraft equipment and systems to determine the best way to repair them.

TRAINING

AVIATION SCHOOLS ONLINE

Students gain hands-on experience working with aircraft systems, engines, hydraulics, and structural components, while preparing for FAA Airframe and Powerplant certification exams.

aviationschoolsonline.com/programs/aviation-maintenance/

TRAINING *(continued)*

COLUMBUS STATE COMMUNITY COLLEGE

Students in the *Aviation Maintenance Technology program* may pursue technical training for the *Airframe and Powerplant Certificate* or the *Associate of Applied Science Degree*. The *Airframe and Powerplant Certificate program* covers all essential subject areas needed to successfully complete the Federal Aviation Administration (FAA) certification process. Students who complete the certificate program may take additional coursework in English, mathematics, physics, and other electives to receive an *Associate of Applied Science Degree*. The certificate and associate degree can be completed in six semesters.

www.csc.edu/academics/departments/aviation-maintenance/

PITTSBURGH INSTITUTE OF AERONAUTICS (PIA)

Aviation Maintenance Technology (AMT)

- 20-month Associate in Specialized Technology (AST) Degree (Pittsburgh Campus)
- 16-month AMT Diploma/Certificate (Youngstown Campus)

This program prepares students to take the FAA Airframe and Powerplant (A&P) Certification Exams

Aviation Electronics Technology (AET)

- 20-month Associate in Specialized Technology (AST) Degree (Pittsburgh Campus)

This program prepares students for the National Center for Aerospace & Transportation Technologies (NCATT) Aircraft Electronics Technician (AET) Certification.

www.pia.edu/

ADDITIONAL RESOURCES

FEDERAL AEROSPACE INSTITUTE

Located at the Eugene F. Kranz Toledo Express Airport, the Federal Aerospace Institute (FAI) is a 14 CFR Part 147 Aircraft Maintenance Technician School (AMTS), offering a program to prepare students to become an FAA-Certified Airframe & Powerplant Aircraft Technician. Offers a 12- and 20-month program.

federalaerospaceinstitute.com/

FEDERAL AVIATION ADMINISTRATION

www.faa.gov/mechanics