AVIONICS PROGRAM

Avionics are the electronic systems used on an aircraft, satellites and spacecraft. Avionic systems include communications, navigation, the display and management of multiple systems, and the hundreds of systems that are fitted to aircraft to perform individual functions. Avionics play a key role in the development and construction of satellites, helicopters and airplanes of all types and sizes. Technicians in the avionics field are responsible for the assembly, maintenance, repair and installation of these airborne and space-related components.

Career Profile

Today’s airplanes are highly complex machines that require reliable parts and service to fly safely. To keep an airplane in peak operating condition, aircraft and avionics equipment mechanics and technicians perform scheduled maintenance, make repairs, and complete inspections. They must follow detailed federal regulations set by the FAA that dictate maintenance schedules for a variety of different operations.

Avionics technicians typically do the following:

- Test electronic instruments, using circuit testers, oscilloscopes, and voltmeters
- Interpret flight test data to diagnose malfunctions and performance problems
- Assemble components, such as electrical controls and junction boxes
- Install instrument panels, using hand tools, power tools, and soldering irons
- Repair or replace malfunctioning components
- Keep records of maintenance and repair work

Job growth is expected to be about as fast as average compared to all occupations. Avionics technicians who complete an aircraft mechanic training program will find the most favorable opportunities.

As the economy and population grows, passenger air traffic will also increase, spurring the growth for avionics technicians. That said, most jobs over the next decade will arise due to retirees and workers leaving the field for other careers.a

Boeing Predicts Increased Demand for Airline Technicians

Aerospace giant Boeing released a long-term market outlook report predicting that as global economies grow and tens of thousands of new commercial jetliners are produced, the demand for pilots and educated technicians will also grow exponentially. The company anticipates more than 600,000 pilots and 660,000 airline maintenance technicians will be needed by 2035. **

Get FCC Certifications

Many industry employers prefer graduates with important certifications. Our training helps you prepare for select Federal Communications Commission (FCC) certification tests. Avionics students have the opportunity to take certification exams in elements 1, 3, and 8 under the auspices of the FCC exams. Additional certifications are available through the National Center for Aerospace and Transportation Technologies (NCATT)††. For students who choose NCATT status, Redstone instructors will help prepare them for required tests. All tests are administered on the Redstone campus.

†fcctests.com, ††ncatt.org
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THE AVIONICS PROGRAM

Associate of Occupational Studies degree in 15 months

Spartan’s career-focused education helps you develop the technical skills manufacturing employers seek. Airplanes are highly complex machines and they must function safely, with extreme tolerances. Avionics technicians work with instruments and computers that control engine, flight and other primary functions including aircraft navigation and radio communications. These systems are now an integral part of aircraft design and have had a huge influence on aircraft capability.

Graduates of the Spartan College Avionics program will master essential avionics concepts in courses such as:

• Digital Electronics
• Communication Theory
• Solid State Electronics
• Gyroscopes and Autopilot Systems
• Troubleshooting Techniques
• Transducer and Wiring Diagrams
• Communications and Navigation Systems
• Pulse Microwave Systems

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Typical Positions for Spartan Graduates

• Avionics Technician
• Field Technician
• Bench Technician

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at spartan.edu/consumerinformation

Our Campus Locations

Broomfield Campus
10851 West 120th Avenue, Broomfield, Colorado 80021
Westminster Campus
1865 West 121st Ave, Suite 100C, Westminster, Colorado 80234
Program offerings vary by location.

Start building your career today!
Call 877-337-8525 or visit us online at Spartan.edu.
If you’re a high school student, please call 888-748-0010