AVIONICS PROGRAM EXPANSION

The avionics program plans to expand the current schedule to include additional start times throughout the year. Additionally, an Associates in Applied Science (A.A.S.) Degree is planned.

To learn more about starting a career in
AVIATION ELECTRONICS (AVIONICS)

call **Michael "Nick" Mansker at 618-797-7393**,
or visit
swic.edu/avionics

SWIC provides specific consumer, textbook and gainful employment information to current and prospective students through the college website and printed materials. For consumer information, visit swic.edu/consumer-information. For student and academic information, refer to swic.edu/catalog or visit Enrollment Services at any SWIC campus for a copy of the catalog. To view the Student Handbook, refer to swic.edu/student-handbook. For textbook information, go to swic.edu/bookstore or visit the Barnes & Noble bookstores at the Belleville or Sam Wolf Granite City campuses.

It is the policy of Southwestern Illinois College to grant equal educational opportunity to all qualified persons without regard to race, creed, color, sex, religion, national origin/ancestry, disability, sexual orientation, veteran's status or age. All academic, extracurricular, research and other educational programs and activities are non-discriminatory.

swic.edu

SOUTHWESTERN™
ILLINOIS COLLEGE

Belleville Campus, 2500 Carlyle Ave.
Sam Wolf Granite City Campus, 4950 Maryville Road
Red Bud Campus, 500 W. South Fourth St.

Aviation Electronics

Avionics

SOUTHWESTERN ILLINOIS COLLEGE

2025

ABOUT THE PROGRAM

The Aviation Electronics (Avionics) Program at Southwestern Illinois College provides students an opportunity to enter the professional field of aviation electronics technology. This program primarily focuses on the avionics installer and systems technician career track. Avionics Technicians are employed by many of the major modern air carriers (airlines) and corporate aircraft manufactures, utilizing today's technologically advanced communications and navigation systems. The SWIC program provides students the ability to gain employment in the high demand aircraft maintenance, repair and overhaul (MRO) facilities throughout the area and the nation.

EXPECTED TASKS

- Avionics systems installation, removal of current avionics systems, avionic system upgrades, installation, and testing of avionics and electrical components in aircraft and space vehicles
- Fabrication of avionics communications and navigation systems wiring harnesses, cabin entertainment systems, satellite communications and data systems, cabin lighting and video systems, functional testing of navigation, communication and data streaming
- Inspect and perform functional tests of avionics equipment including radar, radio navigation and communications equipment

Students will have the opportunity to add industry certifications such as NCATT AET and AEIT which can significantly enhance their career opportunities.

CAREERS

Many avionics technicians are preparing for retirement leaving a critical need for qualified individuals with aviation maintenance skills. The Annual Boeing Company Training Report indicates a need for 716,000 qualified personnel over the next 20 years. Opportunities are readily available with aircraft manufacturers, airlines, and FAA Approved Repair Stations.

Avionics technicians who also add the FAA Airframe and Power Plant certification make themselves exceedingly more versatile, by broadening their career opportunities. Avionics personnel are employed by major aircraft manufacturers, regional and major air carriers (airlines), corporate business jet operators, and many more.

SALARIES

The average Avionics Technician in the U.S. earns approximately $75,000 annually. Salaries can vary significantly depending on important factors such as education, certifications, experience, and additional skills. Avionics technicians employed by major companies and air carriers are always in demand and can earn well above the average compensation. Employers today frequently offer sign on bonuses for aircraft maintenance personnel, including avionics technicians.

ADMISSION PROCEDURES

For more information about the Aviation Electronics (Avionics) program, contact Michael "Nick" Mansker at 618-797-7393, micael.mansker@swic.edu or visit the Sam Wolf Granite City Campus to speak with an Academic Advisor or the program coordinator.

TUITION AND FINANCIAL AID

Tuition is determined by multiplying the number of semester credits by the corresponding tuition rate. (Lab fees and books are additional.) *SWIC tuition and fees are subject to change at any time.*

AVIONICS PROGRAM LAYOUT

The Avionics program at SWIC is is currently offered Monday through Friday from 8 a.m. to 1 p.m..The program is completed over 49 weeks. The program is offered as a stand-alone program or can be accomplished as an addition to the Aviation Maintenance program.

AVIONICS CERTIFICATE (017E)

1st Semester (1st 10 weeks)	**Semester Credits**
AVE 100 Mathematics for Avionics	3
AVE 101 Intro to AC Maint Practices	4

1st Semester (2nd 10 weeks)	**Semester Credits**
AVE 102 Intro to AC Elec and Elect	5
AVE 115 Aircraft/Avionics Elec Power	4
Total Semester Credits	**16**

2nd Semester (1st 8 weeks)	**Semester Credits**
1st 4 Weeks	
AVE 131 Avionics Inst/Harness MFG	4
2nd 4 Weeks	
AVE 141 Avionics Installation Trends	4

2nd Semester (2nd 8 weeks)	**Semester Credits**
1st 4 Weeks	
AVE 159 VHF Nav and Comm Equip	4
2nd 4 Weeks	
AVE 166 Installer/Communications/Navigation Phase I	4
Total Semester Credits	**16**

3rd Semester (3rd 8 weeks)	**Semester Credits**
1st 4 Weeks	
AVE 167 Static, Trans ADS-B & Data	4
2nd 4 Weeks	
AVE 168 Installation of GPS Navigation and Electronics Flight Systems Phase II	4
Total Semester Credits	**8**

3rd Semester (5 weeks)	**Semester Credits**
1st 3 Weeks	
AVE 201 Autopilot/Autoflight Systems	3
Last 2 Weeks	
AVE 203 NCATT AET Test Preparation	2
Total Semester Credits	**5**

Total Program Credits	**45**

All classes must be taken in Sequence. AVE classes are held at the Sam Wolf Granite City Campus, 4950 Maryville Road.