

Aviation Technology Airframe and Power Plant

An Associate of Applied Science Degree Program

PROGRAM DESCRIPTION

The Aviation Technology Associate of Applied Science degree with a concentration in Airframe and Power Plant provides students with the fundamental knowledge and skills of the aviation maintenance and repair industry to meet CFR 14 FAA Part 147 Airframe and Power Plant Certifications. The Aviation Maintenance Technician (AMT 147) concentration imparts knowledge and skills to those striving to become FAA Certified Airframe and Power Plant aircraft maintenance technicians or for career enhancement in aviation and related industries. The program covers knowledge areas listed in CFR 14 FAA Part 147 Appendix Band Appendix D.

APPLICATION PROCEDURE

A student desiring to enroll in the Associate of Applied Science degree program in Aviation Technology - Concentration: Airframe and Power Plant must:

1. Submit the Northeast State Application for Admission to the Office of Admissions and Records.
2. Indicate Aviation Technology - Concentration: Airframe and Power Plant as the desired major on the Northeast State application.
3. See a faculty advisor from the Aviation Technology program prior to registering for classes.

TYPICAL PROGRAM OF STUDY

Course No.	Course Title	Credit
FALL		
Elective	Behavioral/Social Science (an approved elective from the general education core)	3
EDUC 1030	College and Lifelong Learning	3
ENGL 1010	English Composition I	3
Elective	Humanities Elective (an approved elective from the general education core)	3
MATH 1010	Math for General Studies	3
SPRING		
AVIT 1310	Tools, Human Factors, Ground Operations, Servicing, and Aerodynamics	3
AVIT 1320	Aircraft Drawings, Electricity, and Electronics	4
AVIT 1410	Fluid Liners: Materials, Hardware, and Processes	3
AVIT 1420	Forms, Publications, Inspection Concepts, and Weight and Balance	3
Elective	Communications (an approved elective from the general education core)	3
SUMMER		
AVIT 1430	Metallic and Non-Metallic Structures	4
AVIT 1440	Flight Controls and Inspection	3
AVIT 1450	Hydraulics, Pneumatics, and Lighting Gear Systems	4
AVIT 2310	Environmental Systems	4
FALL		
AVIT 2320	Instrumentation, Communication, and Navigation	3
AVIT 2410	Aircraft Electrical Systems	3
AVIT 2420	Fuel Systems, Ice and Rain Protection, and Fire Detection	3
AVIT 2430	Rotorcraft Fundamentals and and Wastewater Systems	3
SPRING		
AVIT 1530	Reciprocating Engine Operations and Propellers	3
AVIT 1540	Turbine Engine Operations and Air Systems	3
AVIT 1550	Engine Inspections and Electrical Systems	3
AVIT 2510	Ignition, Lubrication, and Induction Systems	3
AVIT 2530	Fuel, Exhaust, and Reverser Systems	3
Total Credit Hours		73

Additional learning support courses may be required for degree completion.

TYPICAL JOB OPPORTUNITIES

The Aviation Technology program is designed to prepare individuals for employment in the aviation maintenance or aviation repair industry. The degree will provide individuals with the knowledge and skills associated with repairing and installing aviation electronics, aircraft structures, and aircraft mechanical systems.

Aircraft Maintenance Technician: Performs airframe structural repair, modification, electrical, and hydraulic maintenance. Performs preventative maintenance and periodic inspections in compliance with FAA regulations.

Aircraft Maintenance Lead/Supervisor Position: Leads a team of aircraft technicians performing aircraft airframe inspections, alternations, and repairs.

FOR FURTHER INFORMATION CONTACT:

Allen Bowman
Assistant Professor, Aviation Technology
Telephone: 423.354.5294
albowman@NortheastState.edu

or

Chris Vicars
Instructor, Aviation Technology
Telephone: 423.354.5256
ctvicars@NortheastState.edu

or

Nichole Manz-Young
Dean, Technologies Division
Telephone: 423.354.5253
lnmanzyoung@NortheastState.edu

or

Technologies Division
Telephone: 423.279.7639

PROGRAM COMPETENCIES

Graduate is competent to:

1. Identify, remove/install airframe components.

2. Install, repair, paint, adjust, and inspect structural components.
3. Identify, repair, inspect and maintain electrical, fuel, and hydraulic systems.
4. Identify, remove/install aircraft engines, reciprocating and turbine engines.
5. Install, repair, inspect and maintain aircraft engine accessories.
6. Upon completion of this program and passing the FAA written, oral, and practical examinations the student will be awarded an FAA Airframe Certificate and an FAA Powerplant Certificate.

Northeast State Community College is part of the Tennessee Board of Regents system, Tennessee's largest higher education system, governing 40 post-secondary educational institutions with over 200 teaching locations. The TBR system includes 13 two-year colleges, 27 colleges of applied technology, and TN eCampus, providing programs to students across the state, country, and world.

Northeast State Community College does not discriminate on the basis of race, color, religion, creed, ethnic or national origin, sex, disability, age status as a protected veteran or any other class protected by Federal or State laws and regulations and by Tennessee Board of Regents policies with respect to employment, programs, and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Linda W. Calvert, Vice President for Institutional Advancement and Culture, AffAct@NortheastState.edu, P.O. Box 246, Blountville, TN 37617-0246, 423.323.0222.

Northeast State Community College's policy on nondiscrimination can be found at <https://apps.northeaststate.edu/ie/policymanual/pol.asp?p=254>.

Northeast State Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award the associate degree. Northeast State also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of Northeast State Community College may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (www.sacscoc.org).