# Aviation Technology

**Degree Type**
Associate in Science

The Associate of Science Degree in Aviation Technology prepares students for professional careers in aviation maintenance. Graduates may seek employment with airlines, fixed base operators, or aircraft manufacturers.

Nashua Community College is an FAA approved training facility. Students who complete this program will be prepared to apply for the FAA oral, written, and practical exams for the Airframe and Powerplant Technician Certificate.

The Aviation Technology program places major emphasis on the study of actual aircraft, structures, and powerplants and related systems. The 21-month curriculum includes one summer session and covers a wide variety of subjects concerned with airplanes: reciprocating engines, turbines, fuel systems, propellers, ignition, electrical systems, and hydraulic systems. A great deal of reading is required, as well as the ability to interpret FAA regulations and manufacturer's technical specifications.

In addition to the general admission requirements, Aviation Technology applicants should be aware of the following criteria:

1. Excellent English skills in reading, writing, speaking and understanding are required.
2. High school courses such as physics, electronics, and computer programming are recommended.
3. Students will be required to purchase approximately $1,300 of tools upon entrance to the program.

Technical Standards: Please refer to the Technical Standards section in this catalog for details regarding this program.

Upon completion of the degree in Aviation Technology, graduates will be able to:

1. Perform maintenance and inspections on aircraft using FAA and manufacturers' instructions.
2. Perform maintenance on aircraft structures using FAA and manufacturers' instructions.
3. Perform maintenance on aircraft powerplants using FAA and manufacturers' instructions.
4. Inspect and repair aircraft composite structures using FAA and manufacturers' instructions.
5. Communicate effectively both orally and in writing.
6. Demonstrate legal and moral judgment when supervising others.
7. Demonstrate positive work ethics, integrity, and knowledge of work skills.
8. Exercise a desire to continue professional development and lifelong learning.
9. Successfully pass the FAA airframe and powerplant certification examination.
10. Find employment directly related to the field of study.

In addition, the graduate will be able to demonstrate competency in the general education outcomes.

# First Year - Fall Semester

| Item # | Title | Class Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101N | College Composition | 4 | 0 | 4 |
| AVTN101N | Maintenance Forms & Records | 2 | 3 | 3 |
| AVTN102N | Airframe Structures I | 2 | 6 | 4 |
| AVTN108N | Aviation Drafting & Blueprint Reading | 3 | 0 | 3 |
| | Quantitative Literacy | | | 4 |

## First Year - Spring Semester

| Item # | Title | Class Hours | Lab Hours | Credits |
|---|---|---|---|---|
| AVTN103N | Airframe Structures II | 3 | 6 | 5 |
| AVTN104N | Materials and Processes | 2 | 3 | 3 |
| AVTN106N | Aviation Electronics | 2 | 2 | 3 |
| PSYC130N | Human Relations | 3 | 0 | 3 |
| | English/Communications | | | 3 |

## Summer Semester (9 Weeks)

| Item # | Title | Class Hours | Lab Hours | Credits |
|---|---|---|---|---|
| AVTN105N | Aircraft Systems | 3 | 3 | 4 |
| AVTN202N | Airframe Electrical Systems | 2 | 4 | 3 |
| AVTN203N | Hydraulics & Pneumatics | 3 | 5 | 5 |

## Second Year - Fall Semester

| Item # | Title | Class Hours | Lab Hours | Credits |
|---|---|---|---|---|
| AVTN107N | Digital Logic | 2 | 2 | 3 |
| AVTN204N | Assembly & Rigging | 2 | 6 | 4 |
| AVTN206N | Reciprocating Engines I | 3 | 6 | 5 |
| AVTN208N | Engine Systems | 2 | 3 | 3 |
| AVTN209N | Aircraft Propellers | 2 | 3 | 3 |
| PHYS101N | Physical Science I | 3 | 2 | 4 |

## Second Year - Spring Semester

| Item # | Title | Class Hours | Lab Hours | Credits |
|---|---|---|---|---|
| AVTN207N | Reciprocating Engines II | 3 | 6 | 5 |
| AVTN210N | Turbine Engine & Systems | 3 | 3 | 4 |
| AVTN211N | Carburetion & Fuel Systems | 2 | 3 | 3 |
| AVTN212N | Engine Electrical Systems | 2 | 6 | 4 |
| | Humanities/Fine Arts or Global Awareness | | | 3 |
| | | **Total Credits** | | **88** |