



# Aviation Science/Flight

accredited by the Federal Aviation Administration (FAA)



AVIATION SCIENCE/FLIGHT develops the skills, attitudes and related flight background required by the aviation industry. Students will receive ground school as well as actual instruction and flight time in a primary training aircraft. All flight time earned will be recorded in student log-books, and can be credited toward additional flight instruction and ratings. A Federal Aviation Administration (FAA) approved curriculum is used including practical test standards. A nationally recognized college level aviation fundamentals textbook is the core of the ground/academic instruction. Students will also use computers with flight training simulator programs and graphics as well as academic software to cover aviation science areas and FAA exam material.

## Work Environment

The professional pilot may work in several environments: commercial airlines utilizing large jets, regional airlines with smaller jets or turboprop airplanes, the military, or private businesses. Other positions may be in air traffic control, airport management, air carrier operations, or related governmental positions.

## Career Opportunities

Air Traffic Controller  
Airport Management  
Aviation Sales  
Aviation Law  
Dispatcher  
Flight Instructor  
FAA Flight Service Specialist  
Ground Instructor  
Passenger Agent  
Pilot (Airlines, Corporate, General)  
Tower Operations

## Advanced Standing Available\*

Dowling College  
Farmingdale State University of NY  
Vaughn College of Aeronautics

\*Advanced Standing may be available to those who successfully complete this Tech course. See Articulation Agreements on page 49.

## Employment Outlook

Personnel are needed to fill positions for general, corporate, and commercial aviation. There is an ever increasing demand for trained personnel with related flight background.

## Student Supplies (approx \$100)

1. Aeronautical Charts/Maps
2. Pilots logbook
3. 3rd Class FAA Medical Exam (from an FAA medical examiner)
4. E-6B Computer/Plotter

## Required for Sequence Credit

Career and Financial Management

## Academic credits integrated:

- Technical Math
- Technical Science
- English 12
- Economics/Participation in Gov't

## CTE Endorsement

In order to be granted the Technical Diploma endorsement, students must successfully meet the academic and attendance criteria for a two-year Wilson Tech Certificate of Completion, including Career and Financial Management (CFM), and pass the following national certification exam: Federal Aviation Administration (FAA) Exam in Private Pilot Written Knowledge Exam (PPWKE).

## Course Outline

- FAA Regulations
- Aircraft Safety
- Aerodynamics
- Flight Operations
- Controlled Airspace
- Radio Procedures
- Aircraft Instruments
- Aircraft Systems
- Meteorology
- Preparation for FAA Exams
- Aviation Weather Reports/Charts
- Aeromedical Factors
- Weight & Balance
- Powerplant/Engine
- Basic Navigation
- Radio Navigation
- Flight Planning

## Consider these classes at Tech

- Aircraft Maintenance Technology
- Auto Technology
- Computer Networking & Repair/Technical Electronics
- Drafting/Computer Aided (CAD)

All placements are based upon individual needs and approval from the district and parent/guardian.