Aviation Technology

2 YEAR PROGRAM

HARKNESS

PROGRAM SUMMARY

- Do you want to be the next NASA astronaut or engineer?
- Experience flight by hands-on operation of a Piper Warrior and take off with a licensed pilot as your teacher.
- Experience maintenance procedures with the aircraft in class.
- Create, develop and test modifications to aircraft designs in an engineering exploration style.
- Conceptualize unmanned technology and understand applications to current technology.

COLLEGE CREDIT CONNECTIONS

- Edinboro University
- Mohawk Valley Community College

SPECIAL NOTES

- Students are required to have completed 2 credits in Regents level math and 2 credits in Regents level science upon entering the program.
- Additional requirements necessary for FAA license tests.

PROGRAM ELIGIBILITY

- Technical Endorsement
- 3.75 Credits per Year
- Pathways to Graduation (CTE and CDOS)

Career Paths

PROFESSIONAL CAREERS

Aerospace Engineer
Aerospace Financial Analyst
Air Traffic Controller
Airline Manager
Airport Manager
Aviation Professional Pilot
FAA
Government Employee
NTSB
Test Pilot
Unmanned Aerial Systems

TECHNICAL CAREERS

Airline Flight Attendant
Certified Flight Instructor
Corporate Pilot
Maintenance Technician
Military / National Guard / Reserves
TSA
Unmanned Technical Support Staff

ENTRY LEVEL CAREERS

Airline Baggage Handler
Airline Fueler
Aviation Mechanic In-Training
Cargo Handler
Ground Service Staff
Ramp Agent
Ticket Agent

AVIATION HISTORY AND EVALUATION

- History of Aviation
- Aircraft Types
- New Technology in Aviation
- Federal Regulations
- Research and Development

FLIGHT PRINCIPLES, SYSTEMS AND PERFORMANCE

- Aerodynamics
- Flight Controls
- Airframes / Power Plants
- Weight and Balance

NAVIGATION AND AVIATION WEATHER

- Pilotage
- Ground and Space Based Navigation
- Aviation Meteorology
- Weather Reports and Interpretation
- Current and Emerging Issues

AEROMEDICAL FACTORS

- Aviation Physiology
- Decision Making Process
- Human Factors
- Accident Prevention and Investigation
- Current and Emerging Issues

PILOTING SKILLS

- Pre Flight
- Ground Operations
- Aviation Meteorology
- Weather Reports and Interpretation
- National Aerospace System

UNMANNED AERIAL VEHICLES

- Systems Integration
- Flight Performance
- License Requirements
- Certification

CAREERS IN AVIATION

- Airline Pilots
- Mechanics (Airframe and Powerplants)
- Corporate Pilots
- Ground Crews
- Engineers
- Air Traffic Controllers

AEROSPACE ENGINEERING

- Aircraft Design
- Manufacture Aerospace Vehicles
- Control Systems Integration
- Engineering Process
- Solve Problems with Creative Solutions

erie boces