

# AVIATION CAREERS INSTITUTE

ENGINEERING, MANUFACTURING AND INDUSTRIAL TECHNOLOGY

## Course Overview:

**Program Location:** Capital Region International Airport (shuttle available)

**Sessions Offered:** AM/PM

**Average Lecture Days/Week:** 4 Days

**Average Lab Days/Week:** 1 Days

**Academic Rigor:** 5 out of 5

**Homework:** Weekly

**Required Reading:** The Pilot's Manual Ground School, Pilot Handbook of Aeronautical Knowledge, Airplane Flying Handbook, Crosswinds Aviation DA-20 Training Manual, Airman Knowledge Testing Supplement for Sport, Recreational, Remote and Private Pilot

## Course Description

Eaton RESA, in partnership with the Lansing Capital Region International Airport, offers high school juniors and seniors in all school districts and academies in Eaton, Ingham, and Clinton counties the unique opportunity to learn about careers in aviation. Through the use of classroom lessons and flight simulators, students will learn the information needed to prepare to take the Federal Aviation Administration (FAA) Private Pilot written exam, step 1 of 3 to become a private pilot.

In addition, as school districts are not permitted to provide air flight instruction, students will be connected to flight school partners if they choose to begin flying lessons and work toward earning a Private Pilot's license. Although ground school is primarily geared toward piloting careers, students will also gain exposure to other areas of the aviation industry, including aviation mechanics, military service, drone operations, and airport management, through field trips and guest speakers. A specialized loan program partnership with MSU Federal Credit Union (MSUFCU) has been developed for students in this program to assist with costs associated with flight lessons.

## Student Leadership Opportunities

Student led team-based learning, professional volunteer and community service opportunities

## Success Indicators

- High level of professionalism
- Personal responsibility
- Participation, critical thinking skills
- Determination and dedication to learning
- Strong study skills

## Learning outcomes include, but are not limited to:

- Basic aircraft engine operation
- Operation of aircraft systems
- Flight instruments
- Aircraft performance
- Aerodynamics of flight
- Weather theory and products
- FAA regulations
- Navigation and flight plans
- Time, speed, distance, and fuel calculations using E6B flight computer
- Aeromedical factors and physiology
- National Airspace System and the flight environment
- Radio communications
- Aviation career exploration

## College Credits

- Up to 3 college credits at Eastern Michigan University
- Up to 5 college credits at Northwestern Michigan College

## Available Certification:

- Endorsement to take FAA Private Pilot License Knowledge Exam (requirements must be met)

Updated 12:2025

FOR MORE INFO:  
CONTACT YOUR COUNSELOR,  
CALL 517.483.1596, OR  
VISIT [EATONRESA.ORG/CPC](http://EATONRESA.ORG/CPC)



# AVIATION CAREERS INSTITUTE



## PROFESSIONAL CAREERS

- Aerial Firefighter
- Aerospace Engineer
- Aircraft Broker
- Airline Captain/First Officer
- Air Traffic Controller
- Aviation Lawyer
- Designated Pilot Examiner (DPE)
- Federal Aviation Admin. (FAA) Safety Specialist

## TECHNICAL CAREERS

- Aerial Photographer
- Agricultural Pilot
- Aircraft Dispatcher
- Airframe and Powerplant (A&P) Mechanic
- Airport Terminal Manager
- Certified Flight Instructor
- Flight Attendant
- Survey Pilot

## ENTRY-LEVEL CAREERS

- Aircraft Detailer
- Airframe and Powerplant (A&P) Apprentice
- Airline Customer Service Rep
- Airport Operations Agent
- Ramp Agent
- Fixed Base Operator (FBO) Line Service Technician
- Transportation Security Admin. (TSA) Officer
- Unmanned Aircraft System (UAS) Pilot

ACADEMICS

PROFESSIONAL SKILLS

EXPERIENCES

PASSION

Education with Purpose.

# CAREER TREE®

## Explore Your Future with Career Trees

Career Trees shows how what you learn today can grow into a future career. Each branch represents real jobs and opportunities connected to a specific field, from entry-level roles to advanced professions.

Use the Career Tree to explore your interests, learn what education or training is needed, and plan your next steps after high school. The more you explore, the more you'll see how skills learned now can lead to a strong, rewarding future.

**Scan the QR code below to learn more and watch the program video.**

**SCAN  
ME!**



  
**Fly Lansing**  
Capital Region International Airport



**EXPLORE THE POSSIBILITIES.  
FAST TRACK YOUR FUTURE.**