

2023 – 24

**EAA Aviation Museum™  
Youth Education Center**

*Program Guide*



# EAA Youth Education



EAA's education team focuses on creating affordable and interactive educational programs that promote The Spirit of Aviation®. Students will be engaged through hands-on learning opportunities and leave inspired to continue their exploration of aviation.

## Availability & Cost

Youth Education Center programs are available Monday – Friday from 9:00 a.m. – 5:00 p.m. Scout programs are available on the weekends from 10:00 a.m. – 5:00 p.m.

Program fees are on a per-student basis and are listed by activity selected. Museum entrance is a separate fee per student. There is a minimum of 10 students to qualify for a group rate discount on museum entrance.

Space is available for school groups to consume self-provided bagged lunches. Please indicate a need for space on your reservation form.

## Late Arrival Policy

If your group is going to arrive later than your scheduled arrival time, please contact the gift shop (920-426-4818) to let them know of your late arrival. Late arrivals may result in the adjustment of your programming to stay on track for the scheduled end time. There will not be any price adjustments if your group arrives late.

## Custom Programming

If you have a group that would require customization of our programming, please reach out to our education team to go through some options and ideas.

## Cancellation Policy

Cancellations less than 24 hours prior to scheduled arrival and no-shows will result in a cancellation fee of 50% of the scheduled programming cost.

Weather-related cancellations will not result in any cancellation fees.

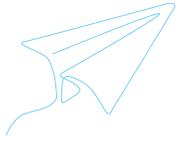
## Chaperones

One adult for every 8 children is required for group programming. Any additional adults will be charged the group rate for museum admission.



EAA.org/Education  
youtheducation@eaa.org

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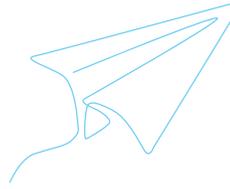
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# Youth Programs



Our programs are designed by licensed educators to engage and challenge students. Programs offered to multiple grade levels are always modified to fit the level of learning appropriate to each incoming group. Reserve your youth program today at [EAA.org/Education](http://EAA.org/Education).

## Straw Rockets

Grades K – 2

Can you build a rocket from a straw? Students will discover the nature of rocketry by creating a simple rocket from a straw to take home. While asking questions and making observations about rockets, students will learn about forces and how they make launching rockets possible.

*\$4/student*

## Elementary Circuits

Grades K – 5

Can you complete the circuit? Students will explore circuitry and how electricity flows using conductive dough (K-3) or paper and conductive tape (4-5.) Through this hands-on experience students will be introduced to simple and parallel circuits and apply their learning in a circuit challenge.

*\$6/student*

## Pop Rockets

Grades K – 5

How far can you launch your rocket? Students will create a simple rocket from a straw that launches by squeezing a bottle. While gathering data from various tests, students will build on their understanding of forces and learn about the effects of balanced and unbalanced forces on rockets.

*\$4/student*

## Paper Pilots

Grades K – 12

Can you design a record-breaking paper airplane? Students will use the engineering process to build, test, and modify paper airplanes all while learning about forces and how they make flight possible.

*\$4/student*

## Wind Tunnels

Grades K – 12

Can you balance the forces? Students will learn about the forces of flight as they attempt to balance a device in our vertical wind tunnels. While gathering data from various tests in the wind tunnel, students will build on their understanding of forces and learn about the effects of balanced and unbalanced forces on falling objects.

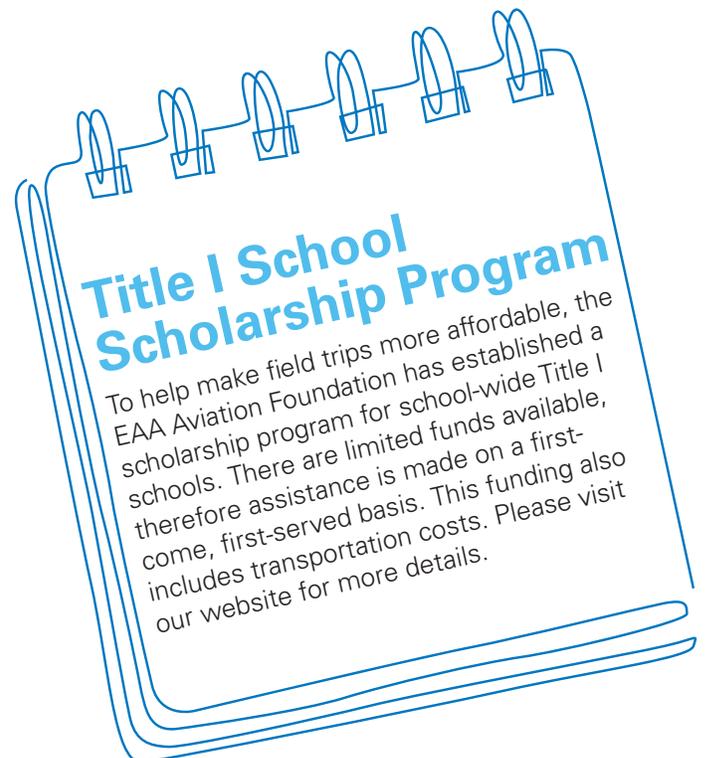
*\$6/student*

## X-Planes

Grades K – 12

Can you design an experimental aircraft? Students will design and build their own X-wing aircraft to take home. (Students in lower grades will be given pre-cut materials.) Then as part of the engineering process, students will test their designs for distance, accuracy, and endurance.

*\$6/student*



## Air-Compressed Rockets\*

Grades 3 – 12

Can you launch a rocket with air? Students will investigate the science of rocketry by creating a simple rocket using compressed air. Students will use the engineering process to build, test, and modify rockets made of bottles or paper.

*\$6/student*

*\* Weather Permitting. Offered April – October.*

## Ground School

Grades 3 – 12

How well can you fly an airplane? Students will learn the basics of aviation by flying a course on a computer flight simulator. While flying the simulator, students will learn about careers in aviation and the basic parts of an airplane.

*\$4/student*

## Operation ATC

Grades 3 – 12

The air traffic control tower has lost its radar. Can you repair the equipment and help the pilot safely land? Introduce students to careers in aviation through this interactive puzzle game. Students will unlock each step in the puzzle as they learn to use the phonetic alphabet or Morse code, read charts and instrument panels, and complete a broken circuit.

*\$4/student*

## 3D Printing

Grades 6 – 12

What is 3D printing used for? Find out more about the uses, types, and how to create 3D printed objects through this program! Students will get to design their own 3D object in Tinkercad and print it on one of our onsite 3D printers.

*\$10/student*

## Aircraft Engine Anatomy

Grades 6 – 12

How does an airplane engine work? Introduce students to careers in aviation maintenance through this hands-on experience. Students will learn about aircraft engines by taking apart a small engine and putting it back together.

*\$4/student*

## Beginning Avionics

Grades 6 – 12

How do circuits work? Introduce students to careers in avionics through electricity. Students will learn about the components of a circuit and how to write code for specific tasks.

*\$6/student*

## Composites

Grades 6 – 12

Composites are all around you! Come explore what composites are, what they are used for, and why they are important to aviation. Then try your hand at building your own composite wing rib.

*\$10/student*

## Flight Planning

Grades 6 – 12

How do pilots know where to go and how much fuel they need on board to make it to their destination? Learn all about flight planning during this program and test out your plan on the flight simulators!

*\$4/student*

## Parachute Engineering

Grades 6 – 12

Can you land your parachutist safely? Students will learn the four forces of flight and how the motion of a parachute changes based on the sum of the forces acting on it. They will use the engineering process to build, test, and modify their parachutes after dropping them from the museum mezzanine.

*\$6/student*



## RC Airplane Build and Fly\*

Grades 6 – 12

Have you always wanted to fly an RC airplane but didn't know where to start? Join us in building RC airplanes. Each student will be provided with a RC airplane kit to build. They will then be able to try their hand at flying their new aircraft using our class set of controllers and motors. Controllers and motors are sold separately in the gift shop for those wishing to continue flight at home.

*\$15/student*

*\* Weather Permitting. Offered April – October.*



## Wooden Wing Rib Design

Grades 6 – 12

How are wings built? Students will explore aircraft fabrication by building a wooden wing rib. While constructing a basic wing structure, students will demonstrate basic measuring skills and learn about careers in aviation.

*\$10/student*



## Accident Investigation

Grades 6 – 12

How does the National Transportation and Safety Board figure out what happened after an aircraft accident? Find out about the roles within the NTSB Go Team and work within your own team to unravel the mystery of what caused an aircraft accident.

*\$4/student*

## Airfoil Design

Grades 6 – 12

How do wings create lift? Through this activity, students will build different airfoil designs. They will then make predictions and test the airfoil in a wind tunnel observing lift and stalls.

*\$6/student*

## Drone Cargo Challenge

Grades 6 – 12

Can you design a way to rescue a stranded person using only a drone and limited supplies? Through this activity, students will learn drone basics, drone careers, and use the engineering process to build, test, and modify a drone rescue attachment.

*\$6/student*

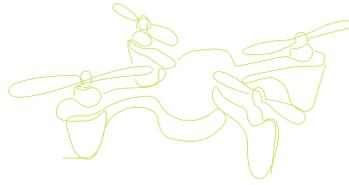
## Fundamentals of Aviation Assembly

Grades 6 – 12

Can you assemble an airplane? Students will move through various stations as they explore the different processes needed to assemble an airframe such as riveting and welding (simulation).

*\$10/student*

# Youth Events



Check our website for specific dates and times at [EAA.org/Education](http://EAA.org/Education).

## Homeschool Half Days

Grades K – 12

Various Tuesdays throughout the year.

Experience homeschool away from home at the EAA Aviation Museum. Explore our collection of more than 200 historic aircraft and engage in hands-on learning. Registration required 24 hours prior to the event.

*\$15/student*

## Saturday Sessions

Grades 6 – 12

Various Saturdays throughout the year.

Join educators from the EAA Aviation Museum on select Saturdays to explore the world of aviation. Each Saturday Session concentrates on a different aspect of aviation and includes a hands-on project to take home. Registration is required 24 hours prior to the event.

*\$15/student*

## Story Time

Ages 3 – 5

Various Thursdays throughout the year.

Join educators from the EAA Aviation Museum for an interactive story time. Educators will read a story aloud and lead a related activity for children and their caregivers. Explore a range of aviation-related topics!

*Free with regular museum admission*



# Scout Day Programs



Check our website for specific dates and times at [EAA.org/Education](http://EAA.org/Education).

## Scouts BSA Aviation Merit Badge Program

Ages 11 – 17

Complete your Aviation merit badge with expert counselors by touring the EAA Aviation Museum, conducting a preflight inspection, and flying a virtual course on a flight simulator.

*\$15/Scout*

## Cub Scouts Aviation Exploration Program

Grades K – 5

Explore the wonder of aviation through paper airplane design, flight simulators, and a tour of the museum, featuring a collection of more than 200 historic aircraft along with world-class galleries and displays.

*\$10/Scout*

## Girl Scout Daisies Program

Grades K – 1

Daisies will learn about how engineers think and solve problems by building a puff mobile. They will learn how thrust can not only move a car, but aircraft too! Also included in the program is a tour of the museum, featuring a collection of more than 200 historic aircraft along with world-class galleries and displays.

*\$10/Scout*

## Girl Scout Brownies Program

Grades 2 – 3

Brownies will design, build, and reengineer a fling flyer to fly the farthest! Also included in the program is a tour of the museum, featuring a collection of more than 200 historic aircraft along with world-class galleries and displays.

*\$10/Scout*

## Girl Scout Juniors Program

Grades 4 – 5

Juniors will design, build, and reengineer a balloon rocket to launch the highest! Also included in the program is a tour of the museum, featuring a collection of more than 200 historic aircraft along with world-class galleries and displays.

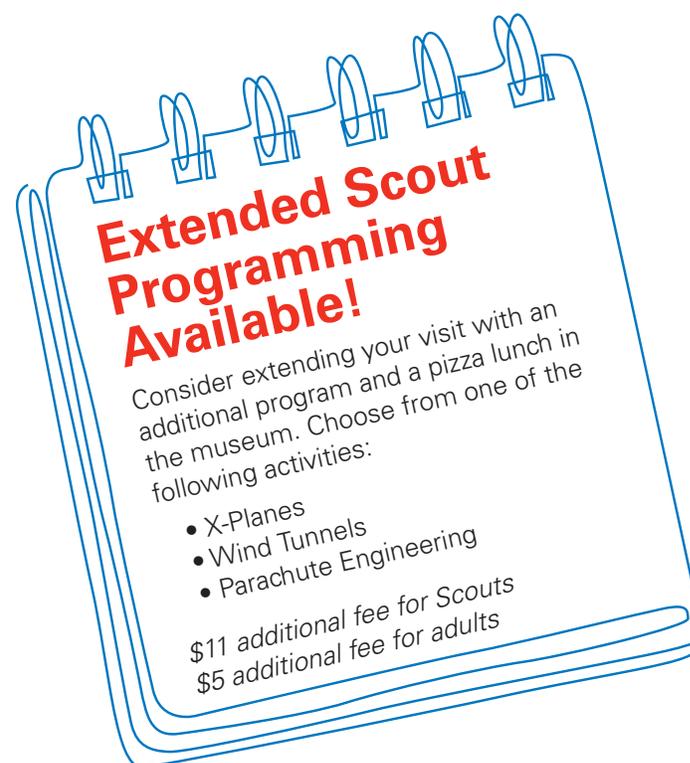
*\$10/Scout*

## Girl Scout Cadettes-Ambassadors Program

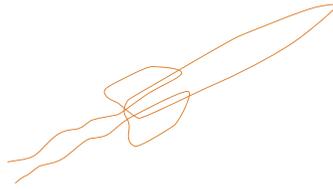
Grades 6 – 12

Cadettes and Ambassadors can explore the wonder of aviation by choosing between two activities: wind tunnels or x-planes. Also included in the program is a tour of the museum, featuring a collection of more than 200 historic aircraft along with world-class galleries and displays.

*\$10/Scout*



# Special Events



## Winter Flight Fest

February

Kids and those young at heart will enjoy hands-on activities, model flying demonstrations, observing skilled pilots land their skiplanes, and special events!

## Girls on the Fly

April and October

Girls on the Fly is an event aimed at girls in grades 6-12 to expose them to the world of aviation as a hobby or potential career path. The day will be filled with activities that include hands-on STEM activities, guest speakers, and exclusive experiences.

## GirlVenture

July

EAA® GirlVenture™ Camp is an aviation experience for girls in grades 9-12 that strives to engage, inspire, and educate young women to pursue their dreams in aviation and beyond. Each day is filled with unique programming, along with time to explore the AirVenture grounds.

## Air Academy

July

Fun and discovery combine for an experience that introduces young people to the world of aviation. Campers are engaged through a variety of hands-on activities and experienced aviation instructors help them delve into flight through studies, hands-on demonstrations, flight simulation, and other exciting events.

*Young Eagles Camp — Ages 12-13*

*Basic Camp — Ages 14-15*

*Advanced Camp — Ages 16-18*

## Teacher Day

July

Teacher Day takes place during EAA® AirVenture® Oshkosh™, providing educators with workshops and presentations on ways to integrate aviation and STEM into teaching curricula.

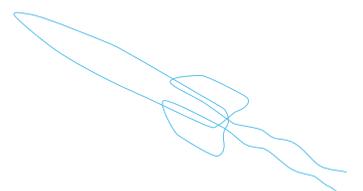
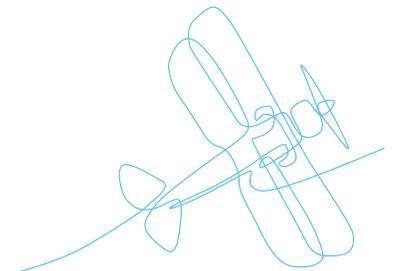
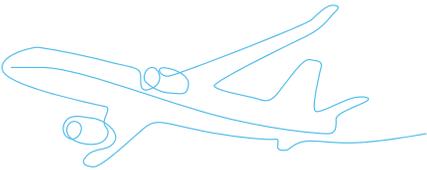
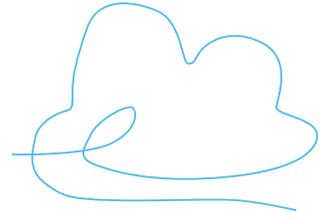
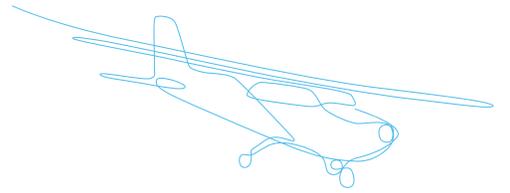
## Space Day

October

Get ready for takeoff and bring out your inner astronaut at the EAA Aviation Museum's annual Space Day which is part of a global celebration of World Space Week.

Kids and adults of all ages are invited as we celebrate with interactive exhibits, hands-on activities, and special guest appearances.





# Take Your Classroom to New Heights With **AeroEducate!**

## What is AeroEducate?

- ✈ FREE K – 12 aviation and aerospace activities
- ✈ Resources for students, teachers, EAA Chapters™, and youth leaders
- ✈ Aviation career and scholarship exploration

## AeroEducate in Your Classroom

- ✈ FREE standards-compliant grab-and-go activities
- ✈ Student career guidance
- ✈ Learning beyond the classroom

## AeroEducate for Your Students

- ✈ Self-paced online activities, hands-on projects, and in-person experiences
- ✈ Explore aviation skills and careers
- ✈ Earn digital achievement badges



Grow Your **Talons**  
Grades: K – 2



Soar Like **Aviore**  
Grades: 3 – 5



Discover Your **AeroPioneer** Path  
Grades: 6 – 8



Launch into **AeroExpedition**  
Grades: 9 – 12



**AeroEducate** Honor Badge  
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