



Aerospace Education for Middle School from the World's Leading Aviation University

The Gaetz Aerospace Institute's mission is to positively impact the trajectory of middle and high school students by preparing them to successfully complete an undergraduate STEM degree and connect them to a profitable career in the aerospace industry.

More than 15,000 Student Lives Impacted Since 2004



Students in an Unmanned Aircraft Systems (UAS) Uses in Agriculture Program

The Middle School Aeronautical course is designed as a capstone course for 8th grade students. The middle school course has components of Minecraft airport design, cybersecurity, engineering, rocketry, unmanned systems, aerospace and aeronautical sciences. The course is designed with four cornerstone projects in which students will explore concepts by brainstorming, designing, building, analyzing, and presenting their work. This is an exploratory STEM course designed to inspire further study in STEM careers and coursework.



FAA Airport design challenge

Students in the course are taught by their middle school teacher and will learn concepts of airport design, engineering, the science of flight, space exploration, rocketry, and introductory components of cybersecurity. The course is designed to expose students to a broad field of STEM fields and careers through a project-based approach



Cornerstone Projects in Middle School Course

- Build a parachute drone delivery package to safely deliver an egg without damage.
- NASA shoe box glider challenge - Build a glider while incorporating a shoe box in the design.
- FAA Minecraft Airport design challenge - Design a local airport using Minecraft.
- United Airlines collaboration project - Coming soon!

Topics in Course

- Aeronautical Science
- Aviation/Aerospace Careers
- Cybersecurity
- Engineering
- Rocketry
- Unmanned Systems (drones)

Typical Academic Course Codes Used for Scheduling

- 2003030-M/J STEM Physical Science
- M/J Research and Critical Thinking

Typical CTE Course Codes Used for Labor Market Alignment

- 8600050-Exploration of Aerospace Technology
- 8600042-Exploration of Production Technology
- 9590400-Fundamentals of Transportation

ERAU partnership provides:

- Summer training at our Daytona Campus where teachers learn directly from our Professors.
- Regional support to link with local industry events, field trips, and guest speakers.
- Curriculum housed on our ERNIE/Canvas Learning Management System along with printed course material sent to your school



For More Information:

Gaetz Programs and Membership

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