## Suggested Course Progression

### Grade 9
- English I Honors
- Algebra I or Honors
- Physical Science Honors or Biology Honors
- Foreign Language I
- Freshman Experience
- Aerospace Technology I
- Introduction to Engineering Design

### Grade 10
- English II or Honors
- Algebra II or Honors
- Biology Honors or Chemistry Honors
- World History Honors or AP
- Foreign Language II
- Aerospace Technology II
- Principles of Engineering

### Grade 11
- AP English Language, English III or Honors
- Geometry or Honors
- Chemistry Honors or Physics Honors
- American History Honors or AP American History
- Digital Electronics
- Aerospace Technology III
- Other Elective

### Grade 12
- AP English Literature, English IV or Honors
- Pre-Calculus, Dual Enrollment Algebra, or AP Statistics
- Dual Enrollment Science (Biology, Chemistry, Physics)
- Dual Enrollment U.S. Gov’t & Dual Enrollment Economics or AP U.S. Gov’t & AP Macroeconomics
- Aerospace Engineering
- Advanced Technology Applications
- Other Elective

---

**Supporting Organizations**

- ACE Aviation Summer Camp
- American Institute of Aeronautics and Astronautics: Simulation Systems
- CUBIC
- D. C. Jaeger
- Department of Defense
- Greater Orlando Aviation Authority
- Lockheed Martin
- NASA
- Naval Air Warfare Center Training Systems Division
- Organization of Black Aerospace Professionals
- Orlando Executive Airport
- Orlando Science Center
- Showalter Flying Services
- Southwest Airlines
- TEQ Games
- University of Central Florida
- University of Florida
- YMCA

**For More Information Contact**

Taylor Plumblee,
Administrative Dean of Magnet Programs
Oak Ridge High School
Taylor.Plumblee@ocps.net
(407) 852-3200 x6102405

---

The School Board of Orange County, Florida does not discriminate in admission or access to or treatment of employment in its programs and activities on the basis of race, color, religion, age, sex, national origin, marital status, handicap or any other reason prohibited by law. The equal opportunity supervisor responsible for compliance is Barbara Jenkins and she may be contacted at 407-317-3239.
Vision Statement

The mission of the Aviation and Aerospace Engineering Magnet Program is to provide sound academic preparation for high school, college and beyond, while affording valuable career readiness experiences in the fields of aviation and aerospace. Students will be immersed in a rigorous academic core coupled with a variety of career-relevant electives complemented by student involvement in such real-world work experiences as career-site field trips, job-shadowing, mentor programs and internships.

Academic Overview

Orange County Public School, through the Oak Ridge High School Aviation Magnet, is committed to providing high quality, hands-on college and career readiness experiences and will assist in meeting the future demand in the aerospace industry by engaging our students in a rigorous, engaging, and comprehensive curriculum.

Students can earn a variety of industry certifications as they learn the skills necessary on new high-end, professional-grade simulators.

Comprehensive partnerships have been developed to support this program. They include but are not limited to the following:

- TEQ Games- Software development and program support
- Department of Defense - Funding
- Lockheed Martin – Simulators, grants, enrichment opportunities, and real work experiences
- CUBIC – Internships for students
- Naval Air Warfare Center Training Systems Division (NAWCTSD) – Metrics and enrichment
- Various Colleges and Universities - partnerships with major universities including scholarship opportunities.
- YMCA – Extended learning and enrichment
- Greater Orlando Aviation Authority – Field trips, hands on experiences, and guest speakers

Employment Outlook in Aviation and Aerospace

- There is expected to be a huge job deficit in the aviation and aerospace industry from now until 2030.
  - 440,000 pilots (Boeing report)
  - 660,000 technicians (Boeing report)
  - 40,000+ aerospace engineers (Wharton report)

- With 2,000 companies in aviation and aerospace, Florida has the second largest share of the nation’s aviation and aerospace business, according to the U.S. Department of Labor.

- Boeing, Lockheed Martin, Raytheon, and Northrop Grumman, four of the largest and most significant companies in aviation and aerospace, have worksites in Central Florida.

- Florida has valuable industry assets including 22 airports of 10,000+ feet, two spaceports, and advanced space vehicle, payload processing, and launch/landing facilities – supporting a full range of industry activities, from R&D, to testing, to service.

- Florida’s 19 commercial airports account for 10% of the nation’s total passengers and enplane about 8% of the nation’s air cargo.

- PricewaterhouseCoopers reports Florida is the number one state for aviation manufacturing attractiveness.

- Florida is home to 20 major military installations.

Consequently, there exists an increasing need to provide relevant educational experiences for young people interested in aviation and aerospace in order to provide future workers for industry growth right here in Central Florida.

Benefits of the Program

Students who participate in the Aviation and Aerospace Academy Magnet Program will have the opportunity to experience or receive the following:

- Classroom and enrichment activities
- Flight simulator instruction on military-grade flight simulators
- Students graduate from the program with multiple industry certifications
- Career related extra-curricular activities and volunteer opportunities
- Field trip opportunities and site visits
- Job shadowing
- Internships
- Scholarships

Requirements for Admission

1. Complete the online OCPS Magnet application
2. Minimum 2.5 GPA
3. Strong school attendance record
4. Positive behavior record

Additionally, all applicants are expected to meet the overall standards of Oak Ridge High School and Orange County Public Schools, as well as exhibit the exemplary behavior associated with involvement in a rigorous academic program.