

CURRICULUM SPOTLIGHT: INTRO TO AEROSPACE

# GAIN REAL-WORLD SKILLS AND EXPLORE CAREERS

### Learn a variety of skills while gaining experience through Core Plus Aerospace.

The Core Plus Aerospace curriculum introduces students to the aerospace industry, which supports career interests across a variety of fields from manufacturing to engineering and aviation. Through hands-on activities and classroom instruction, students study the history of flight and aviation science as well as how aircraft are made and maintained.

## WITH YOUR SKILLS ANY PATHWAY IS POSSIBLE



#### Future Opportunities:

- · Certificate and degree programs
- · Earn and learn programs
- A job in manufacturing



#### What kind of credits can you earn?

Depending on your district, you can earn math, science, English, Career and Technical Education (CTE), and elective credits.

#### **Pay Scale:**

Average annual salary for manufacturing employees in Washington: \$87,000

#### Skills you will learn:







TECHNICAL SKILLS

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More Info: www.coreplusaerospace.org

MATH

## CURRICULUM SPOTLIGHT: INTRO TO AEROSPACE

**REAL-WORLD SKILLS. LAUNCHING CAREERS.** 

Developed by industry, the Core Plus Aerospace curriculum includes 1,080 hours of instruction and hands-on learning opportunities that prepare Washington high school students for aligned post-high school programs, apprenticeships, and manufacturing careers. Core Plus Aerospace students graduate with options.

Core Plus Aerospace students learn the history of flight, starting from the earliest legends and going through modern day and beyond. Students study aviation science, such as the forces of flight, how aircraft fly based on Bernoulli's Principle and Newton's Third Law, and how flight is controlled. They complete hands-on activities, such as building an air tunnel. Students learn to recognize different aircrafts and how an aircraft is made, following it from the design stage through production. Students also receive an overview of aircraft safety, ground operations, and servicing.

#### **DEVELOPING REAL-WORLD SKILLS**

Among many skills, students learn to:

- Identify safety precautions when welding around aircraft.
- Demonstrate flight line safety precautions.
- Describe how to tiedown and secure an aircraft.
- Describe how to start an aircraft engine: reciprocating, turboprop, and turbofan.
- Summarize what safety precautions are taken to prevent damage from lightning, thunderstorms, fog, ice and hailstorms.

### CONNECTING TO WASHINGTON STATE LEARNING STANDARDS

Among many standards covered, Core Plus Aerospace students learn to:

- Use models and simulations to explore systems, identify trends, and forecast possibilities.
- Communicate and collaborate to learn with others.
- Analyze, synthesize, and ethically use information to develop a solution, make informed decisions and report results.
- Develop skills to use technology effectively.

## **EXPLORE MORE**

Learn more about the curriculum and hear from Core Plus Aerospace teachers, students, and graduates employed in industry and attending college programs across Washington state. **Source f Coreplusaero Coreplusaerospace.org**