

GAIN REAL-WORLD SKILLS AND EXPLORE CAREERS

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

Commercial aircraft production often relies on rivet joints to connect parts, as these joints are strong, durable, easy to inspect, and do not require the use of heat, which has the potential of damaging materials such as aluminum. The Core Plus Aerospace curriculum introduces students to the practice of riveting, familiarizing them with rivet features, classification, and applications. Students also receive instruction on rivet installation in line with industry standards.

WITH YOUR SKILLS ANY PATHWAY IS POSSIBLE

1

Opportunities after graduation:

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

2

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 workers in Washington: \$87,000

Skills you will learn:



SAFETY



MATH



TECHNICAL SKILLS



More Info:

www.coreplusaerospace.org

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 direct entry into high-demand manufacturing jobs, apprenticeships, and college programs. Students graduate with more options and a clear advantage for the future.

Rivet installation and accuracy is critical in aircraft production and is the emphasis of Core Plus Aerospace coursework featuring classroom instruction and hands-on learning. Core Plus Aerospace instruction highlights rivet features, measurement, and classification of rivets, safety review, functional reading of instructions, project planning, and execution. Students have the opportunity to use a rivet gun, die, retaining spring, and bucking bar, along with personal protective equipment. Students will learn to install and remove solid rivets that meet industry engineering requirements with a minimum of 80% accuracy.

DEVELOPING REAL-WORLD SKILLS

Among many skills, students learn to:

- Identify the components of a fastening system using rivets.
- Distinguish between sheer and tension as types of stress/load on installed rivets.
- Understand basic rivet gun usage and rivet die selection.
- Identify and describe the features of solid shank rivets.
- Apply knowledge to select and use the appropriate bucking bar for a particular rivet installation.
- Demonstrate the normal installation of rivets.

CONNECTING TO WASHINGTON STATE LEARNING STANDARDS

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

- Reason quantitatively and use units to solve problems.
- Look for and express regularity in repeated reasoning.
- Understand independence and conditional probability and use them to interpret data.
- Use the rules of probability to compute probabilities for compound events.

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.



COREPLUSAEROSPACE.ORG