

GAIN REAL-WORLD SKILLS AND EXPLORE CAREERS

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

Precision machining in manufacturing is the process of shaping large pieces of material into more precise parts that meet very exact specifications. It involves cutting, milling, turning, and electrical discharge machining.

Core Plus Aerospace students develop precision machining skills by learning the fundamentals of sawing, milling machines, lathe machines, and surface grinding. They practice safety guidelines, learn new vocabulary, and gain knowledge about appropriate tools and machines.

WITH YOUR SKILLS ANY PATHWAY IS POSSIBLE

1

Future Opportunities:

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

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 employees in Washington: \$88,000

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 aligned post-high school training and college programs, apprenticeships, and manufacturing careers. Core Plus Aerospace students graduate with options.

Students begin by learning and practicing important machine shop safety guidelines. They are introduced to sawing vocabulary, as well as how to select the appropriate cutting tool and use horizontal and vertical band saws. Students learn about milling machine fundamentals, including primary uses, benefits, anatomy, what to consider before milling, and safety procedures. Students become familiar with a lathe machine's primary uses, how it works, its features, and safety guidelines. Students also are introduced to the basics of surface grinding.

DEVELOPING REAL-WORLD SKILLS

Among many skills, students learn to:

- Adhere to machine shop safety guidelines.
- Compare and contrast horizontal and vertical band saws.
- Calculate the RPM and feed rate of a milling machine.
- Identify the primary uses of a milling machine, lathe, and surface grinder.
- Demonstrate knowledge on how surface grinders work.

CONNECTING TO WASHINGTON STATE LEARNING STANDARDS

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

- Reason quantitatively and use units to solve problems.
- Interpret the structure of expressions.
- Model with mathematics.
- Reason quantitatively and use units to solve problems.
- Apply geometric concepts in modeling situations.

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