CORE PLUS AEROSPACE

CURRICULUM SPOTLIGHT: DRILLING

GAIN REAL-WORLD SKILLS AND EXPLORE CAREERS

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

The Core Plus Aerospace curriculum introduces students to drilling and preparing holes for installation of fasteners or rivets. Students learn to select and safely handle proper tools and equipment.

Hands-on activities include drilling a variety of holes in aluminum that meet industry quality standards. Students build knowledge and skills that apply to a variety of jobs within several industries, including aerospace manufacturing.

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

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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 training and college programs, apprenticeships, and manufacturing careers. Core Plus Aerospace students graduate with options.

This curriculum grounds students in the fundamentals of using drills and associated tools to create quality holes in metal that meet industry standards, in preparation for installation of permanent fasteners. Lesson content highlights how to select and operate proper drilling tools and accessories safely, avoiding common defects to meet standards. Hands-on activities allow students to drill a variety of holes in metal plates, which are assessed for correct diameter, angularity, parallel walls, scratch-free bores, proper edge margins, and correct countersink depth.

DEVELOPING REAL-WORLD SKILLS

Among many skills, students learn to:

- Identify the characteristics of a properly drilled hole in aluminum that meets industry standards.
- Identify proper drilling equipment by size, type, and speed.
- Convert available fractional drill sizes to the required decimal equivalent drill bit needed.
- Identify the correct deburring/chamfering tool.
- Define fastener relief requirements.

CONNECTING TO WASHINGTON STATE LEARNING STANDARDS

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

- Summarize, represent, and interpret data on a single count or measurable variable.
- Make inferences and justify conclusions from sample surveys, experiments, and observational studies.
- Calculate expected values and use them to solve problems.
- Reason quantitatively and use units to solve problems.
- Visualize relationships between two-dimensional and three-dimensional objects.

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.

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