

# TEACHING REAL-WORLD SKILLS WITH HANDS-ON LEARNING IN ADVANCED MANUFACTURING

Core Plus Aerospace instructors teach students aerospace and advanced manufacturing skills in interactive, engaging classroom settings. Developed and supported by industry leaders like Boeing, the curriculum includes 1,080 hours of total instruction that provide students with a foundation in manufacturing as well as real-

world skills that are vital to any career. Core Plus Aerospace students will graduate from high school with a clear advantage when applying for jobs in manufacturing, pursuing apprenticeships, and entering certificate and degree programs in fields like avionics, applied science, engineering, mechatronics, and more.

## DID YOU KNOW?

**\$96K**

the average annual compensation for manufacturing workers in Washington state

**4M**

manufacturing jobs projected to be open in the United States by 2030

**6,500+**

manufacturing firms in Washington state

## THE CURRICULUM

- The first year (or 540 hours) of Core Plus Aerospace's two-year curriculum focuses on foundational skills that are common across industry sectors, such as shop safety, materials science, precision measurement, and the use of hand and power tools.
- The second year consists of industry-specific coursework in aerospace. This includes instruction in areas such as fiber optics, advanced composites, robotics, and more.



## FREQUENTLY ASKED QUESTIONS

### **Where is Core Plus Aerospace and advanced manufacturing coursework taught?**

Instructors are delivering the Core Plus Aerospace curriculum in more than 50 high schools and skills centers across Washington state and more schools are adding it each year. Visit [coreplusaerospace.org](http://coreplusaerospace.org) and use the location tool to find out where it is currently offered.

### **How do I implement the Core Plus Aerospace and advanced manufacturing curriculum?**

Contact the OSPI CTE Program Office to access the curriculum and review the implementation guide to better understand what it takes to get started.

### **What models are there for how the curriculum is used in practice?**

There are several levels of Core Plus Aerospace and advanced manufacturing coursework deployed statewide. For example, a comprehensive high school could deliver the first 10 modules of the curriculum in 180 instruction hours. Schools with block schedules that allow for 360 to 540 hours of instruction would be able to teach 11-18 modules. All of these models are helping students build a foundation in manufacturing so that they are job-ready after they graduate from high school and will have a clear advantage when pursuing apprenticeships or college.

### **Is there a cost or license fee to use the Core Plus Aerospace curriculum?**

Boeing invested \$750,000 in the curriculum development and it is available to educators online, free of charge. The curriculum is reviewed and updated by industry and education experts every year.

### **Is there professional development available to teach Core Plus Aerospace and advanced manufacturing?**

OSPI hosts multiple professional development sessions throughout the year for Core Plus Aerospace instructors. These sessions provide in-person and virtual PD opportunities to familiarize yourself with the curriculum, interact with peers, get hands-on training, and earn clock hours.

### **What other opportunities are available to Core Plus Aerospace and advanced manufacturing students?**

In addition to classroom instruction and industry exploration, Core Plus Aerospace students will have opportunities to compete in statewide skills competitions through SkillsUSA and are invited to apply for the Core Plus Aerospace paid summer internship program, sponsored by Boeing.

### **Can Core Plus Aerospace be used to meet the high school Graduation Pathway requirement?**

Yes. Students can use credits earned through Core Plus Aerospace coursework to satisfy the CTE Sequence Graduation Pathway.

### **What credits can students earn by taking Core Plus Aerospace?**

OSPI has approved statewide course equivalencies in English, science and third year math, so that your students can earn the credits they need for graduation and the next steps on their education-to-career pathways.

Some schools also offer dual-credit opportunities, enabling students to earn college credit while completing Core Plus Aerospace and advanced manufacturing coursework in high school.

### **Can students earn an industry certificate or college credit?**

Instructors are encouraged to use and award the Core Plus Aerospace Certificate of Competency, which is backed by industry leaders like Boeing. The certificate tracks student mastery of specific skills and is a signal to employers and postsecondary programs that students are ready for work, apprenticeships, or college.

Students in many Core Plus Aerospace classes also complete other standard industry and safety certifications as part of their programs.

Some programs offer college credit for students who continue to pursue aviation in a postsecondary setting.

### **What funding is available to support delivery of the Core Plus Aerospace curriculum?**

There are multiple grant opportunities available to support start-up costs, expansion and maintenance of established programs, and professional development. Contact OSPI to learn more.

### **Want to learn more?**

Visit OSPI's CTE Program page at [k12.wa.us/careerteched](http://k12.wa.us/careerteched) or call 360-725-6245.

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