



AEROSPACE COMPOSITES

Program of Study

One or Two Year Program



Career Cluster: Manufacturing

Career Pathway: Production Manufacturing

This Career Pathway Program of Study can serve as a guide along with other career planning materials as learners continue on a career path. Courses listed within this program are only recommended coursework and should be individualized to meet each learner's education and career goals. The courses outlined below are only RECOMMENDATIONS. Course offerings may vary from high school to high school. Additionally, a PPR (Personalized Pathway Requirement) may be used in lieu of some of the World Language and/or Art credit requirement. See your high school counselor for additional graduation requirement information.

PPR – Personal Pathway Requirement

*World Language – 2.0 credit may be met through a PPR

**Art – 1.0 credit may be met through a PPR

EDUCATION LEVELS	GRADE	English/ Language Arts	Math	Science	Social Studies	Other Requirements	Electives	Summer School Offerings High School Credit Free of Charge	
MS	6-8	Grade Level ELA	Grade Level Math	Grade Level Science	Grade Level Social Studies		STEM Classes	Summer School Available After the 8th Grade Year	
High School	9	ELA 9	Integrated Math I OR Intensive Integrated Math I	Physical Science		Health (.5) PE (.5) World Language* Art**	CTE & Elective Options to be Taken Grades 9-11 <ul style="list-style-type: none"> ● STEM I ● STEM II ● STEM III ● CHS-UW/CSE 142 Computer Programming ● AP Computer Sci Principles ● CHS-UW/ESRM 101 Forestry ● CHS-UW/ESRM 150 Wildlife ● Anytime Fitness ● Physics ● Leadership 	PCSC Summer School Aerospace Machining & Fabrication, Aerospace Composites, Automotive Technology, Construction Trades, PC Networking & Hardware Repair at PCSC See PCSC Summer School application for additional course offerings at other PCSC summer school locations. Offerings also include CTE classes that may satisfy academic credit graduation requirements – specifically in art, PE, and health.	
	10	ELA 10	Integrated Math II	Biology OR BIOL 101 (CHS/CWU)	World History OR HIST 103 (CHS-EWU)	PE World Language* Art**			
	11	ELA 11 OR ENGL 101 (CHS- EWU)	Integrated Math III OR 1.0 3 rd year Math credit Aerospace Composites at PCSC	STEM 1 and 2 OR STEM 3 OR Chemistry	US History OR AP US History	PE			Junior Year Options at PCSC: Aerospace Composites at PCSC OR Aerospace Machining at PCSC
	12	ELA 12 OR ENGL 170 (CHS- EWU)	1.0 Math credit Aerospace composites at PCSC	4 th YR Science Recommended: STEM 1 and 2 OR STEM 3 OR Chemistry	Civics & Economics OR Pol Sci 210 (CHS/CWU)				3.5 Occupational Ed Credits Aerospace Composites at PCSC
Credit Equivalency, Certifications & Dual Credit	High School Credit Equivalency: 1.0 Technical Math/3 rd year Math 3.5 CTE/Elective			Certifications Earned at PCSC: Industry-Developed Aerospace Certificate First Aid/CPR			Articulation/Dual Credit: (DC) Clover Park Technical College – 13 credits Bates Technical College – 5 credits CHS (College in the High School) UW – 15 credits CHS (College in the High School) CWU – 5 credits CHS (College in the High School) EWU – 15 credits <i>Articulation agreements and number of credits are subject to change</i>		

Clubs and Extracurricular Activities	TSA Technical Student Association	OMS TSA Advisor: Oliver Chadwick chadwicko@orting.wednet.edu	OHS TSA Advisor: Denise Thompson thompsond@orting.wednet.edu
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Additional Program Information

Course Description

The Aerospace Composites program is designed to prepare students to fabricate, assemble and repair composite materials. Students design, build and repair composite parts and assemblies using the same techniques as our industry partners. Students also earn a locally-developed manufacturing certificate.

<p>Course Outline</p> <ul style="list-style-type: none"> ● Safety ● Boeing Core+ Curriculum ● Precision Measurement ● Part Layout and Assembly ● Mechanical Joinery, Drilling Precision Holes and Affixing Industry-Based Fixtures ● Hand Laid Composite Fabric Manufacturing ● Resin Infusion Manufacturing ● Thermoset Pre-Impregnated Epoxy Fabric Manufacturing ● Root Cause Analysis ● Corrective Action ● 6 S's ● Pneumatic Hand Tool Use and Safety 	<p>Local Public Post-Secondary Options</p> <ul style="list-style-type: none"> ● Bates Technical College ● Clover Park Technical College ● Everett Community College ● Western Washington University ● Central Washington University ● Washington State University ● University of Washington 																						
<p>Careers & Job Outlook</p> <p>The information provided below is from the Washington State Employment Security Department.</p> <p>https://esd.wa.gov/labormarketinfo/learn-about-an-occupation#/details</p> <table border="0"> <thead> <tr> <th style="text-align: left;">Occupation</th> <th style="text-align: left;">Annual Salary</th> </tr> </thead> <tbody> <tr> <td>Aerospace Engineering and Operations Technicians</td> <td>\$94,781</td> </tr> <tr> <td>Aerospace Engineers</td> <td>\$122,009</td> </tr> <tr> <td>Aircraft Mechanics and Service Technicians</td> <td>\$69,604</td> </tr> <tr> <td>Assemblers and Fabricators (Composites & Metal)</td> <td>\$37,479</td> </tr> <tr> <td>CNC Machine Tool Programmers</td> <td>\$106,622</td> </tr> <tr> <td>Industrial Engineering Technician</td> <td>\$87,361</td> </tr> <tr> <td>Machinist</td> <td>\$52,597</td> </tr> <tr> <td>Machinists and Tool and Die Makers</td> <td>\$40,910</td> </tr> <tr> <td>Occupational Health and Safety Specialists</td> <td>\$80,823</td> </tr> <tr> <td>Sheet Metal Workers</td> <td>\$67,225</td> </tr> </tbody> </table>	Occupation	Annual Salary	Aerospace Engineering and Operations Technicians	\$94,781	Aerospace Engineers	\$122,009	Aircraft Mechanics and Service Technicians	\$69,604	Assemblers and Fabricators (Composites & Metal)	\$37,479	CNC Machine Tool Programmers	\$106,622	Industrial Engineering Technician	\$87,361	Machinist	\$52,597	Machinists and Tool and Die Makers	\$40,910	Occupational Health and Safety Specialists	\$80,823	Sheet Metal Workers	\$67,225	<p>Additional career and outlook information can be found on the following websites</p> <p>www.bls.gov www.careerbridge.wa.gov www.careercruising.com</p>
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The Orting School District and Pierce County Skills Center are Equal Opportunity Employers and comply with all federal rules and regulations, including Title IX, RCW 28A.640, RCW 28A.642 and Section 504. Orting and Bethel do not discriminate on the basis of sex, race, creed, religion, color, national origin, age, honorably discharged veteran or military status, sexual orientation including gender expression or identity, the presence of any disability, or use of a trained service animal by a person with a disability in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. For Orting please contact Title IX officer Debbie Christianson Director of Human Resources at 360-893-6500, Section 504 Coordinator and Civil Rights Coordinator Chris Willis Director of Student Support Services at 360-893-6500. For Bethel please contact Title IX officer Bryan Stoleski, Director of Athletics and Security at [253.683.6055](tel:253.683.6055), Section 504 coordinator Lori Haugen, Executive Director of Special Education at [253.683.6920](tel:253.683.6920) or Civil Rights coordinator Debbie Carlman, Director of Equity and Achievement at [253.683.6035](tel:253.683.6035) with any questions or complaints.