



SCIENCE, TECHNOLOGY, ENGINEERING & MATH (STEM) Program of Study



Career Cluster: Science, Technology, Engineering and Math

Career Pathways: Engineering and technology; Science and math

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 - requirement can be met through a PPR however **world language is required** at 4-year universities and is highly recommended for individuals going into STEM

**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		Tech Foundations Comp Sci Discoveries I & II Video Game Design I & II	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 • AP Computer Science Principles • AP Computer Science A Programming • Physics 	PCSC Summer School Aerospace Machining & Fabrication Aerospace Composites Automotive Technology DigiPen Video Game Development Technical Writing IT/Cybersecurity
	10	ELA 10	Integrated Math II	Biology OR AP Biology	World History OR AP World History	PE World Language* Art**		
	11	ELA 11 OR AP Language	Integrated Math III OR Applied Algebra 2 OR Consumer Math 3	Chemistry	US History OR AP US History	PE	Junior Year Options at PCSC IT/Cybersecurity Video Game Development Aerospace Composites Aerospace Machining	
	12	ELA 12 OR AP Lit	Pre-Calculus OR AP Calculus OR PCSC 1.0 Technical/3rd Year Math Credit - IT/Cybersecurity	Physics	Civics & Economics OR AP Government		Senior Year Options at PCSC IT/Cybersecurity DigiPen Video Game Development Aerospace Composites Aerospace Machining	
Credit Equivalency, Certifications & Dual Credit	High School Credit Equivalency: CTE Science PCSC High School Credit Equivalency: 1.0 Technical Math/3 rd year Math 3.5 CTE/Elective			Certifications Earned at OHS: None Certifications Earned at PCSC: PC Pro Network Pro Security Pro Ethical Hacker Pro A+ *Optional: CompTIA & ETA Certifications			Articulation/Dual Credit: (DC) OHS – AP Comp Sci – up to 10 credits PCSC: Bates Technical College – Up to 18 credits Clover Park Technical College – Up to 9 credits Pierce College – Up to 10 credits <i>Articulation agreements and number of credits are subject to change</i>	

Clubs and Extracurricular Activities	TSA Technology 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

Students in STEM classes learn and practice skills that prepare them for diverse post-high school education and training opportunities, from apprenticeships and two-year college programs to four-year college and graduate programs.

<p>Course Descriptions</p> <p>See the OHS Course Guide in Xello for</p> <ul style="list-style-type: none"> ● STEM I ● STEM II ● STEM III ● AP Computer Science Principles ● AP Computer Science A Programming ● Physics 	<p>Local Public Post-Secondary Options</p> <ul style="list-style-type: none"> ● Lake Washington Technical College ● South Seattle College ● Renton Technical College ● Columbia Basin College ● Eastern Washington University ● Western Washington University ● Central Washington University ● Washington State University ● University of Washington 																		
<p>Careers & Job Outlook</p> <p>There are more than 380 related careers. Visit Career Bridge to explore all jobs and trends</p> <p>Here is a small sample:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Occupation</th> <th style="text-align: left;">Annual Salary</th> </tr> </thead> <tbody> <tr> <td>Engineer: Aerospace/Chemical/Materials/Civil</td> <td>\$92,000 – 106,730</td> </tr> <tr> <td>Mechanical Engineering Tech</td> <td>\$64,000</td> </tr> <tr> <td>Technical Writer</td> <td>\$81,810</td> </tr> <tr> <td>Statistician</td> <td>\$94,180</td> </tr> <tr> <td>Chemist</td> <td>\$81,620</td> </tr> <tr> <td>Atmospheric or Space Scientist</td> <td>\$90,610</td> </tr> <tr> <td>Nuclear Technician</td> <td>\$71,120</td> </tr> <tr> <td>Mathematician</td> <td>\$114,400</td> </tr> </tbody> </table>	Occupation	Annual Salary	Engineer: Aerospace/Chemical/Materials/Civil	\$92,000 – 106,730	Mechanical Engineering Tech	\$64,000	Technical Writer	\$81,810	Statistician	\$94,180	Chemist	\$81,620	Atmospheric or Space Scientist	\$90,610	Nuclear Technician	\$71,120	Mathematician	\$114,400	<p>Additional career and outlook information can be found on the following websites</p> <p>www.bls.gov www.careerbridge.wa.gov Xello</p>
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The Orting School District is an Equal Opportunity Employer and comply with all federal rules and regulations, including Title IX, RCW 28A.640, RCW 28A.642 and Section 504. Orting does 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.