



INFORMATION TECH/CYBERSECURITY

Program of Study

One or Two-Year Program



Career Cluster: Information Technology

Career Cluster Pathway: Network Systems, Information Support and Services

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/Middle School <i>Tech Foundations</i> <i>Computer Science Discoveries 1</i> <i>Computer Science Discoveries 2</i> <i>Video Game Design 1 & 2</i>	Summer School Available After the 8th Grade Year
High School	9	ELA 9	Integrated Math I OR Intensive Integrated Math I	Grade Level Science		PE Health World Language* Art**	CTE & Elective Options to be Taken Grades 9-11 Skilled and Technical Sciences <ul style="list-style-type: none"> Digital Photography 1, II & III Multimedia Design I & II STEM <ul style="list-style-type: none"> STEM I STEM II STEM III AP Computer Science Principles Computer Programming (CSE 142 – CHS/UW) Physics Junior Year Options at PCSC IT & Cybersecurity Video Game Development Aerospace Composites Aerospace Machining	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	Grade Level Science	World Studies OR HIST 103 (CHS/EWU)	PE World Language* Art**		
	11	ELA 11 OR ENGL 101 (CHS/EWU)	Integrated Math III OR Consumer Math III	Grade Level Science	US Studies OR AP US	PE		
	12	ELA 12 OR ENGL 170 (CHS/EWU)	1.5 Technical/3rd Year Math Credit - IT/Cybersecurity at PCSC OR OHS Advanced Math classes	RECOMMEND 4 TH YR Science	Civics & Economics OR POLS 210 (CHS/CWU)			
Credit Equivalency, Certifications & Dual Credit	High School Credit Equivalency: 1.5 Technical Math/3 rd year Math 3.0 CTE/Elective			Certifications Earned at PCSC: PC Pro Network Pro Security Pro Ethical Hacker Pro A+ *Optional: CompTIA & ETA Certifications			Articulation/Dual Credit: 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 Technical Student Association	OMS TSA Advisor: Oliver Chadwick chadwicko@orting.wednet.edu	OHS TSA Advisor: Denise Thompson thompsonsd@orting.wednet.edu
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Additional Program Information

Course Description

The PC Networking & Hardware Repair program is designed to provide students with a broad understanding of the installation, troubleshooting and management of computers, hardware, and computer networks in alignment to industry standards. Students will also learn cybersecurity fundamentals and automation for factories using Programmable Logic Controllers (PLC's).

<p>Course Outline</p> <ul style="list-style-type: none"> ● Leadership & Employability (Year 1 & 2) ● Computer Hardware ● Operating Systems ● Computer Troubleshooting – Repair & Maintenance, Basic ● Computer Troubleshooting – Repair & Maintenance, Advanced ● Computer Networking (Year 1 & 2) ● Laptops ● Mobile Devices (Year 1 & 2) ● Peripherals ● Printers ● Storage (Year 1 & 2) ● Safety (Year 1 & 2) ● Emerging Technologies (Year 1 & 2) ● Intro to PLCs ● Security (Year 2) ● PLC Advanced Electrical (Year 2) ● PLC Pneumatic (Year 2) 	<p>Local Public Post-Secondary Options</p> <ul style="list-style-type: none"> ● Clover Park Technical College ● Bates Technical College ● Pierce College ● Tacoma Community College ● University of Washington ● University of Washington-Tacoma ● Central Washington University ● Washington State University ● Boise State University ● Perry Technical Institute ● Southwest Washington Electrical JATC 																		
<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>Computer User Support Specialist</td> <td>\$66,927</td> </tr> <tr> <td>Computer Network Specialist</td> <td>\$88,660</td> </tr> <tr> <td>Network & Computer Systems Administrator</td> <td>\$106,713</td> </tr> <tr> <td>Web Developer</td> <td>\$110,236</td> </tr> <tr> <td>Computer Network Architect</td> <td>\$111,416</td> </tr> <tr> <td>Information Security Analyst</td> <td>\$128,152</td> </tr> <tr> <td>Database Administrator</td> <td>\$131,128</td> </tr> <tr> <td>Computer & Information Systems Manager</td> <td>\$152,976</td> </tr> </tbody> </table>	Occupation	Annual Salary	Computer User Support Specialist	\$66,927	Computer Network Specialist	\$88,660	Network & Computer Systems Administrator	\$106,713	Web Developer	\$110,236	Computer Network Architect	\$111,416	Information Security Analyst	\$128,152	Database Administrator	\$131,128	Computer & Information Systems Manager	\$152,976	<p>Additional career and outlook information can be found on the following websites:</p> <p>www.bls.gov www.careerbridge.wa.gov</p>
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The Pierce County Skills Center provides equal opportunities. Employer and employee with all federal anti-discrimination laws, including Title VII, EO 12816, EO 12891, EO 12958, EO 13152, EO 13209, EO 13491, EO 13526, EO 13545, EO 13559, EO 13774, EO 13918, EO 14176, EO 14285, EO 14504, EO 14586, EO 14643, EO 14701, EO 14812, EO 14974, EO 15034, EO 15127, EO 15150, EO 15176, EO 15230, EO 15276, EO 15329, EO 15350, EO 15390, EO 15428, EO 15450, EO 15490, EO 15506, EO 15532, EO 15550, EO 15559, EO 15568, EO 15625, EO 15663, EO 15696, EO 15727, EO 15762, EO 15805, EO 15833, EO 15864, EO 15896, EO 15925, EO 15951, EO 15981, EO 16034, EO 16064, EO 16096, EO 16128, EO 16160, EO 16192, EO 16224, EO 16256, EO 16288, EO 16320, EO 16352, EO 16384, EO 16416, EO 16448, EO 16480, EO 16512, EO 16544, EO 16576, EO 16608, EO 16640, EO 16672, EO 16704, EO 16736, EO 16768, EO 16800, EO 16832, EO 16864, EO 16896, EO 16928, EO 16960, EO 16992, EO 17024, EO 17056, EO 17088, EO 17120, EO 17152, EO 17184, EO 17216, EO 17248, EO 17280, EO 17312, EO 17344, EO 17376, EO 17408, EO 17440, EO 17472, EO 17504, EO 17536, EO 17568, EO 17600, EO 17632, EO 17664, EO 17696, EO 17728, EO 17760, EO 17792, EO 17824, EO 17856, EO 17888, EO 17920, EO 17952, EO 17984, EO 18016, EO 18048, EO 18080, EO 18112, EO 18144, EO 18176, EO 18208, EO 18240, EO 18272, EO 18304, EO 18336, EO 18368, EO 18400, EO 18432, EO 18464, EO 18496, EO 18528, EO 18560, EO 18592, EO 18624, EO 18656, EO 18688, EO 18720, EO 18752, EO 18784, EO 18816, EO 18848, EO 18880, EO 18912, EO 18944, EO 18976, EO 19008, EO 19040, EO 19072, EO 19104, EO 19136, EO 19168, EO 19200, EO 19232, EO 19264, EO 19296, EO 19328, EO 19360, EO 19392, EO 19424, EO 19456, EO 19488, EO 19520, EO 19552, EO 19584, EO 19616, EO 19648, EO 19680, EO 19712, EO 19744, EO 19776, EO 19808, EO 19840, EO 19872, EO 19904, EO 19936, EO 19968, EO 19999. The Pierce County Skills Center provides equal opportunities. Employer and employee with all federal anti-discrimination laws, including Title VII, EO 12816, EO 12891, EO 12958, EO 13152, EO 13209, EO 13491, EO 13526, EO 13545, EO 13559, EO 13774, EO 13918, EO 14176, EO 14285, EO 14504, EO 14586, EO 14643, EO 14701, EO 14812, EO 14974, EO 15034, EO 15127, EO 15150, EO 15176, EO 15230, EO 15276, EO 15329, EO 15350, EO 15390, EO 15428, EO 15450, EO 15490, EO 15506, EO 15532, EO 15550, EO 15559, EO 15568, EO 15625, EO 15663, EO 15696, EO 15727, EO 15762, EO 15805, EO 15833, EO 15864, EO 15896, EO 15925, EO 15951, EO 15981, EO 16034, EO 16064, EO 16096, EO 16128, EO 16160, EO 16192, EO 16224, EO 16256, EO 16288, EO 16320, EO 16352, EO 16384, EO 16416, EO 16448, EO 16480, EO 16512, EO 16544, EO 16576, EO 16608, EO 16640, EO 16672, EO 16704, EO 16736, EO 16768, EO 16800, EO 16832, EO 16864, EO 16896, EO 16928, EO 16960, EO 16992, EO 17024, EO 17056, EO 17088, EO 17120, EO 17152, EO 17184, EO 17216, EO 17248, EO 17280, EO 17312, EO 17344, EO 17376, EO 17408, EO 17440, EO 17472, EO 17504, EO 17536, EO 17568, EO 17600, EO 17632, EO 17664, EO 17696, EO 17728, EO 17760, EO 17792, EO 17824, EO 17856, EO 17888, EO 17920, EO 17952, EO 17984, EO 18016, EO 18048, EO 18080, EO 18112, EO 18144, EO 18176, EO 18208, EO 18240, EO 18272, EO 18304, EO 18336, EO 18368, EO 18400, EO 18432, EO 18464, EO 18496, EO 18528, EO 18560, EO 18592, EO 18624, EO 18656, EO 18688, EO 18720, EO 18752, EO 18784, EO 18816, EO 18848, EO 18880, EO 18912, EO 18944, EO 18976, EO 19008, EO 19040, EO 19072, EO 19104, EO 19136, EO 19168, EO 19200, EO 19232, EO 19264, EO 19296, EO 19328, EO 19360, EO 19392, EO 19424, EO 19456, EO 19488, EO 19520, EO 19552, EO 19584, EO 19616, EO 19648, EO 19680, EO 19712, EO 19744, EO 19776, EO 19808, EO 19840, EO 19872, EO 19904, EO 19936, EO 19968, EO 19999.