PROGRAM OF STUDY

Career Cluster: Information Technology

Career Cluster Pathway: Programming and Software Development

*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. **Note**: Many items have links to external resources with more information.*

REQUIRED CREDITS	GRADE	English/ Language Arts (4.0 credits)	Social Studies (2.5 credits)	Math (2.0 credits)*	Science (2.0 credits)	Fine Arts (1.0 credits)	Health/ Fitness (2.5 credits)**	Electives (6.5 credits)	Related Career & Technical / Occupational (1.0 credits) / Certificate and Tech Prep (notation on HS and TP alignment)	SAMPLE Occupations Relating To This Pathway (*indicates job in high demand) (◉ indicates a "green" job)
SECONDARY SAMPLE COURSE OFFERINGS	9	English 1 or Honors English 1	Pacific Northwest History (.5)	Algebra I Geometry *Class of 2013 (add't 1.0 credit) or Algebra II or Pre-Calculus or Calculus or CTE Equivalent (Students must pass a math competency test or have four years of math credits)	Integrated Science or Adv Int Science	Credits from Art Courses or CTE Equivalent	Health (.5)	Elective courses (6.5) and Project Me and Other CAA require-ments **Successfully completing two years of physical education and one semester of health is required for high school graduation	**ASD CTE COURSE OPTIONS** Digital Communications Digitools Intro to Web Page Design Advanced Web Page Design Computer Programming I Computer Programming II Computer Applications Work Based Learning CTE Grad Project **LEADERSHIP** Skills USA FBLA **TECH PREP ARTICULATIONS** Digital Communications/Digitools – Grays Harbor College (3cr.) Computer Applications – Grays Harbor College (12cr.) Computer Programming II – South Puget Sound Community College (5cr.) **CERTIFICATION** MOS Certification Work Readiness Credential	**Medium Preparation** • Software Applications Specialist • Game Developer • Tester **Considerable Preparation** • Applications Analyst • Applications Engineer • Computer Software Engineers, Applications* • Computer Programmers* • Computer Software Engineers, Systems Software* • Computer Systems Analysts* • System Administrators* • Test Engineer • CTE Teacher • Web Designers **Extensive Preparation** • Computer and Information Systems Managers* • Software Quality Assurance Engineers
	10	English 2 or Honors English 2	US History		Biology **or** AP Biology **or** Biotechnology **or** Horticulture **or** Natural Resources I		Credits from Health and Fitness Courses			
	11	English Electives or Business English	World History **or** Economics **or** Economics II		Science Electives					
	12	English Electives or Business English	World History **or** Economics **or** Economics II **and** CWP							

POST SEC EDUC	**Technical Certification** *(instruction provided through certified training and/or testing centers)*	**Apprenticeship Opportunities**	**2-yr or ATA Degree** *(Find specific colleges at www.checkoutacollege.com)*	**4 –yr Degree or Advanced Training**	

Computer Science • Heritage University **Computer Programming** • South Puget Sound Community College and various other technical and community colleges **Computer Systems Networking and Telecommunications** • Grays Harbor College and various other technical and community colleges	To learn more about Apprenticeship, visit **Labor and Industries** website. This pathway does not currently have any active apprenticeships.	**Computer & Information Sciences** • Heritage University • ITT Technical Institute • Walla Walla College **Computer & Information Systems Security** • Clover Park Technical College • Edmonds Community College • Green River Community College • Highline Community College • Spokane Falls Community College • Whatcom Community College **Computer Programming** • South Puget Sound Community College and various other technical and community colleges **Computer Systems Networking and Telecommunications** • Grays Harbor College and various other technical and community colleges **Information Technology** • ITT Technical Institute **Microcomputer Applications** • Grays Harbor College and various other technical and community colleges	**Computer Engineering** • Pacific Lutheran University • Seattle Pacific University • Seattle University • University of Washington • Washington State University **Computer Programming** • City University **Computer & Information Sciences** • Central Washington University • City University • DeVry University-Washington • Eastern Washington University • Gonzaga University • Henry Cogswell College • Heritage University • ITT Technical Institute • Pacific Lutheran University • Saint Martin's University • Seattle Pacific University • Seattle University • University of Phoenix-Seattle Campus • University of Puget Sound • University of Washington • Walla Walla College • Washington State University • Western Washington University • Whitworth College **Information Technology** • University of Phoenix-Seattle Campus • University of Washington • City University **CTE Secondary Education Teacher** • Education Degree in a CTE program area with 2000 hours of related work experience • Industry Route Certificate requires 6000 hours of work experience in the field and completion of a state approved CTE Preparation Program along with passage of Basic Skills Math and English	