

Industry Sector: INFORMATION TECHNOLOGY

Pathway: AS Degree: Programming



Level	Grade	English Language Arts	Math	Social Studies	Science	Career Technical Education Course	Other Required Courses or Recommended Electives		Sample Occupations relating to this pathway (Including SOC Code)
SECONDARY	9	English	Algebra I	Social Science	Science		Physical Education		Occupations requiring a high school diploma <ul style="list-style-type: none"> ➤ Most all ROP concentrations ➤ Book writer ➤ Musician ➤ Artist
	10	English	Math	World History	Science		Physical Education	Visual/Performing Arts or Foreign Language	
POSTSECONDARY	11	English		US History					
	12	English (Recommended)		Civics and American Government		Introduction to Programming			
(High School courses listed above are the Minimum State requirements)									Occupations requiring some post-secondary <ul style="list-style-type: none"> ➤ Web Site Maintainer ➤ QA Tester Occupations requiring a 2 year Degree <ul style="list-style-type: none"> ➤ Computer Programmer ➤ Database Specialist ➤ Web Server programmer Occupations requiring a BA/BS Degree <ul style="list-style-type: none"> ➤ Software Designer ➤ Software Project Manager Industry recognized certifications, licenses, credentials or apprenticeships related to this pathway. <ul style="list-style-type: none"> ➤ Oracle Certified Associate SE7 ➤ Oracle Certified Professional SE7
POSTSECONDARY	13	As Degree Suggested Course Sequence Years 1 & 2							
		Fall Year 1	Spring Year 1	Summer	Fall Year 2	Spring Year 2			
	14	CCTPG 22 Programming Concepts and Methodology II (4)	CCTPG 47 C/C++ Programming (3)	GE (3)	CCTPG 51 Database Management (4)	CCTIS 29 -or- BUSAD 29 Project Management (3)			
		Complete one course: CCTPG 5, 9, 45 CCTDM 10, 14 CCTSS 11 (3-4)	CCTPG 24 Programming Concepts and Methodology II (4)		CCTPG 48 Visual Basic Programming (3)	Complete one course: MATH 2 Statistics (4) MATH 8 Trigonometry (3) MATH 12 Finite Math (3) MATH 16 Pre-calculus (5) Meets GE Area B.4			
		GE (4)	Complete one course: CCTPG 5, 9, 45 CCTDM 10, 14 CCTSS 11 (3-4)		Complete one course: CCTPG 5, 9, 45 CCTDM 10, 14 CCTSS 11 (3-4)	Complete one course: CCTPG 5, 9, 45 CCTDM 10, 14 CCTSS 11 (3-4)			
		GE (3)	GE (3)		GE (3)	GE (3)			
					Physical Education Activity Course (1)	Physical Education Activity Course (1)			
GE requirements – One each from the following areas: (A.1 or A.3, A.2, B.1 or B.2, Math 104, C.1 or C.2, one course from DO-D9, one course E, plus 1 Physical Education activity courses and one additional unit of activity.)									

Smith/Ellis 2016-2017