



Level 1	1282- Computer Science I
Level 2	1916- AP Computer Science Principles
Level 3	1283 (Math)/1284(LOFE)- AP Computer Science A 1992- Computer Science II
Level 4	1741- Practicum in Information Technology 1752/1753-Career Preparation I/II

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
	Certified Computing Professional	Computer Programming/ Programmer Genera	Management Information Systems, General	Computer Software Engineer
	Cloud Technology Associate Certification	Computer Software Engineer	Computer Software Engineer	Computer Science
	AEM 6 Developer	Computer Science	Computer Science	Information Science/ Studies
	Certified Software Analyst	Certified Software Analyst	Information Science/ Studies	

Occupations	Median Wage	Annual Openings	% Growth
Software Developer, Systems Software	\$103,334	2,985	25%
Software Developers, Applications	\$104,499	6,311	30%
Computer Programmers	\$79,893	1,454	9%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES	
Exploration Activities: Join TSA Participate in coding club at school	Work Based Learning Activities: Obtain an industry-based certification.



The Programming and Software Development program of study explores the occupations and education opportunities associated with researching, designing, developing, and testing operating systems-level software, compilers, and network distribution software for medical, industrial, military, communications, aerospace, business, scientific, and general computer applications. This program of study may also include exploration into creating, modifying, and testing the codes, forms, and script that allow computer applications to run.



The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing, scientific research and professional and technical services, including laboratory and testing services, and research and development services.

Successful completion of the Programming and Software Development program of study will fulfill requirements of the Business and Industry and STEM endorsement if the math and science requirements are met. Revised - July 2020

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITS (PREQ) COREQUISITES (CREQ)	Grade
AP Computer Science Principles	A3580300 (1 credit)	None	9-12
Computer Science I	03580200 (.5 to 1 credit)	PREQ: Algebra I	9-12
AP Computer Science A, MATH, LOTE	A3580110 (MATH) (1 credit) A3580120 (LOTE) (1 credit)	None	9-12
Computer Science II	03580300 (1 credit)	PREQ: Algebra I, Computer Science I, or Fundamentals of Computer Science	11-12
Practicum in Information Technology	13028000 (2 credit) 13028005 (3 credit) 13028010 (2 credit) 13028015 (3 credit)	PREQ: Two high school information technology courses	12
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	11-12