



## COURSES

### LEVEL 1

Fundamentals of Computer Science (Intro to App Development - 8th grade)

Computer Science I (Swift Coding)

### LEVEL 2

AP Computer Science A

AP Computer Science Principles

### LEVEL 3

Computer Science II (Advanced Computer Science)

### LEVEL 4

Computer Science III

Practicum of A/V Production

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Oracle Certified Association JAVA SE 8 Programmer	Certified Computing Professional	Computer Programming/Pro grammer General	Management Information Systems, General	
Oracle Certified Database Associate	Cloud Technology Associate Certification		Computer Software Engineer	
	AEM 6 Developer		Computer Science	
	Certified Software Analyst		Information Science/Studies	
*Includes Level I and Level II Certificates				
For more information on postsecondary options for this programs of study, visit TXCTE.org				

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Computer Network Architect	\$111, 633	1,454	9%
Software Developer, Systems Software	\$111,285	1,674	17%
Software Developer, Applications	\$103,325	7,388	31%
Computer and Information Systems Managers	131,204	1,426	19%

## WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

### Exploration Activities:

Girls in Computer Science,  
Computer Science Club (UIL)

### 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 a Business and Industry or STEM Endorsement. Approved Statewide Program of Study - September 2019