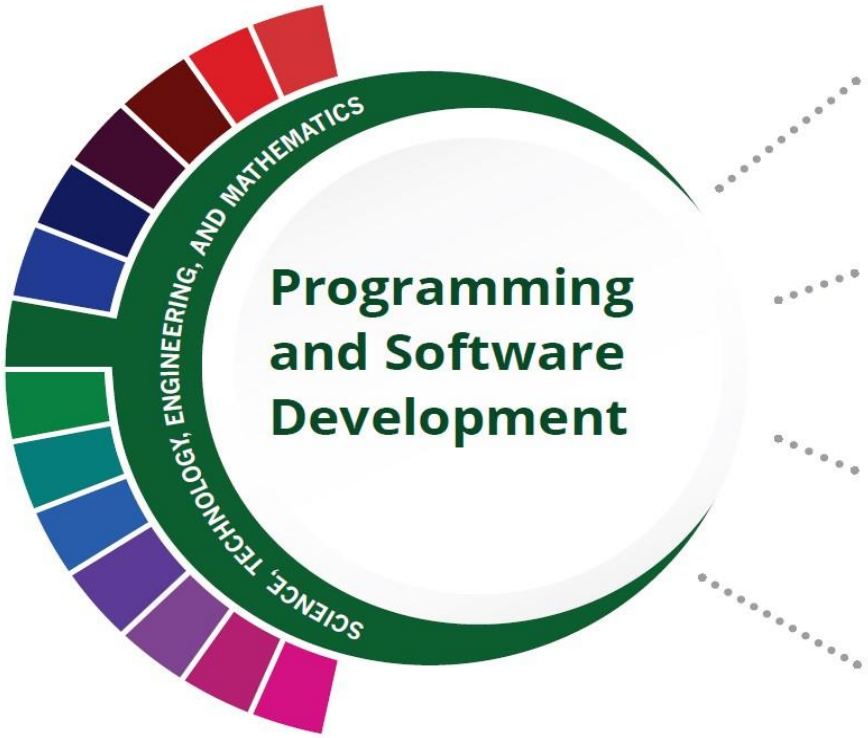

	Fundamentals of Computer Science
Level 1	
Level 2	AP Computer Science Principles Computer Science I
Level 3	AP Computer Science A, MATH
Level 4	Practicum in Information Technology Practicum in Audio/Video Production Practicum in Science, Technology, Engineering, and Mathematics Career Preparation I

DUNCANVILLE HIGH SCHOOL/ INDUSTRY CERTIFICATION	POST-SECONDARY OPTIONS			MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	
Oracle Certified Association JAVA SE 8 Programmer	Certified Computing Professional	Computer Programming/ Programmer Genera	Management Information Systems, General	Computer Software Engineer
Oracle Certified Database Associate	Cloud Technology Associate Certification	Computer Software Engineer	Computer Software Engineer	Computer Science
	AEM 6 Developer	Computer Science	Computer Science	Information Science/ Studies
Microsoft Technology Associate, Introduction to Programming Using Java or Java Script	Certified Software Analyst	Certified Software Analyst	Information Science/ Studies	

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

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:	Work Based Learning Activities:
Join TSA Participate in coding club at school	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

Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITS (PREQ) COREQUISITES (CREQ)	Grade
Fundamentals of Computer Science	03580140 (.5 to 1 credit)	None	9-12
AP Computer Science Principles	A3580300 (1 credit)	None	9-12
Computer Science I	03580200 (.5 to 1 credit)	PREQ: Algebra I	9-12
Game Programming and Design	03580380 (.5 to 1 credit)	PREQ: Algebra I	9-12
Introduction to C# Programming Applications	N1302812 (1 credit)	None	11-12
AP Computer Science A, MATH, LOTE	A3580110 (MATH) (1 credit) A3580120 (LOTE) (1 credit)	None	9-12
Mobile Application Development	03580390 (.5 to 1 credit)	PREQ: Algebra I	11-12
Computer Science II	03580300 (1 credit)	PREQ: Algebra I, Computer Science I, or Fundamentals of Computer Science	11-12
Advanced Cloud Computing	N1302813 (1 credit)	None	10-12
IB Computer Science Standard Level	I3580200 (2 credits)	None	9-12
Discrete Mathematics for Computer Science	03580370 (.5 to 1 credit)	PREQ: Algebra	11-12
Computer Science III	03580350 (1 credit)	PREQ: Computer Science II, AP Computer Science A	12
IB Computer Science Higher Level MATH, LOTE	I3580310 (MATH) (1 credit) I3580320(LOTE) (1 credit)	None	9-12
Practicum in Information Technology	13028000 (2 credit) 13028005 (3 credit) 13028010 (2 credit) 13028015 (3 credit)	PREQ: Two high school information technology courses	12
Practicum in Audio/Video Production	13008700 (2 credit) 13008705 (3 credit) 13008710 (2 credit) 13008715 (3 credit)	PREQ: Audio/Video Production II Lab	11-12
Practicum in Science, Technology, Engineering, and Mathematics	13037400 (2 credit) 13037405 (3 credit) 13037410 (2 credit) 13037415 (3 credit)	PREQ: Algebra I and Geometry	12

COURSE NAME	SERVICE ID	PREREQUISITS (PREQ) COREQUISITES (CREQ)	Grade
Practicum in Entrepreneurship (TBD)	TBD	TBD	TBD
Career Preparation I	12701300 (2 credit) 12701305 (3 credit)	None	11-12
Independent Study in Technology Applications	03580900 (.5 to 1 credit)	None	12
Independent Study in Evolving/Emerging Technologies	03581500 (.5 to 1 credit)	None	12

FOR ADDITIONAL INFORMATION ON THE SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS CAREER CLUSTER, PLEASE CONTACT:

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https://tea.texas.gov/cte