



COURSES

- GRADE 9**
Fundamentals of Computer Science OR
Computer Science I
Level 1

- GRADE 10**
Computer Science I OR
AP Computer Science Principles
Level 2

- GRADE 11**
AP Computer Science A OR
Computer Science II
Level 3

- GRADE 12**
Computer Science II OR
Independent Study in Evolving/Emerging
Technologies
Level 4

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Oracle Certified Association JAVA	Certified Computing Professional	Computer Programming/Pro grammer General	Manegment Information Systems, General	
	Cloud Technology Associate Certification	Computer Software Engineer		
MTA Java	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	\$103, 334	2985	25%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES	
Exploration Activities: Join TSA Participate in a 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.



It is the policy of Weslaco ISD not to discriminate on the basis of race, color, national origin, sex or handicap in its vocational programs, services or activities as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended.

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 - Modified by Weslaco ISD Career & Technical Education 5/21



COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Fundamentals of Computer Science	03580140 (.5 to 1 credit)	None	9-12
Computer Programming I	13027600 (1 credit)	None	10-12
AP Computer Science Principles	A3580300 (1 credit)	None	9-12
Computer Science I	03580200 (.5 to 1 credit)	PREQ: Algebra I	9-12
Introduction to C# Programming Applications	N1302812 (1 credit)	None	11-12
AP Computer Science A	A3580110 (1 credit) A3580120 (1 credit)	None	9-12
Mobile App Development	03580390 (.5 to 1 credit)	PREQ: Algebra I	11-12
Computer Programming II	13027700 (1 credit)	None	11-12
Computer Science II	03580300 (1 credit)	PREQ: Algebra I, Computer Science I, or Fundamentals of Computer Science	11-12
Computer Science III	03580350 (1 credit)	PREQ: Computer Science II, AP Computer Science A	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 A/V Production	13008700 (2 credit) 13008705 (3 credit) 13008710 (2 credit) 13008715 (3 credit)	PREQ: Audio/Video Production II Lab	11-12
Practicum in STEM	13037400 (2 credit) 13037405 (3 credit) 13037410 (2 credit) 13037415 (3 credit)	PREQ: Algebra I and Geometry	12
Career Preparation I	12701300 (2 credit) 12701305 (3 credit)	None	11-12

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

<https://tea.texas.gov/cte>