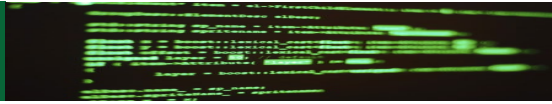


Information Technology Career Cluster

The Information Technology (IT) career cluster focuses on the design, development, support, and management of hardware, software, multimedia, and systems integration services. This career cluster includes occupations ranging from Software Developer and Programmer to Cybersecurity Specialists and Network Analysts.

Computer Science



The Computer Science program of study focuses on occupational and educational opportunities associated with researching, designing, developing, testing, and 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 includes creating, modifying, and testing the codes, forms, and script that allow computer applications to run.

Secondary Courses for High School Credit

Level 1

- Fundamentals of Computer Science

Level 2

- Computer Science I

Level 3

- Computer Science II ¹

Level 4

- Practicum in Science, Technology, Engineering, and Mathematics – Computer Science (H)



Work-Based Learning and Expanded Learning Opportunities

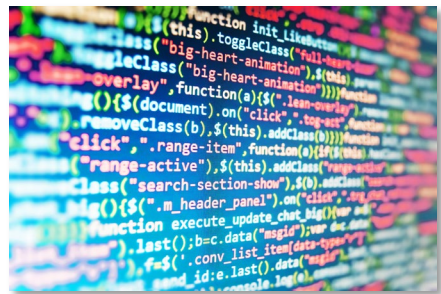
Exploration Activities	Work-Based Learning Activities
<ul style="list-style-type: none"> • Join Technology Student Association (TSA) 	<ul style="list-style-type: none"> • Intern or job shadow at a local IT company or with a software developer

Industry-Based Certifications

- Certified Entry-Level Python Programmer (PCEP) ¹

Aligned Advanced Academic Courses

- AP Calculus AB
- AP Statistics
- AP Computer Science Principles



Postsecondary Opportunities

Associates Degrees

- Computer Programming
- Web Page Digital/Multimedia and Information Resources Design

Bachelor's Degrees

- Data Science
- Computer Engineering

Master's, Doctoral, and Professional Degrees

- Management Science
- Computer Software Engineering

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Computer User Support Specialists	\$56,000	5,700	21%
Software Developer	\$117,500	15,300	36%
Computer Programmers	\$93,500	1,200	4%

Successful completion of the Computer Science program of study will fulfill requirements of the STEM endorsement. Revised – May 2024



Computer Science Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE LEVEL(S)
Fundamentals of Computer Science	03580140 (1 credit)	None	9

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE LEVEL(S)
Computer Science I	03580200 (1 credit)	Fundamentals of Computer Science & Algebra I	10

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE LEVEL(S)
Computer Science II	03580300 (1 credit)	Computer Science I	11

Level 4

Course Name	Service ID	PREREQUISITES	GRADE LEVEL(S)
Practicum in Science, Technology, Engineering, and Mathematics - Computer Science (H)	13037400 (2 credits)	Computer Science II & Geometry	12

FOR ADDITIONAL INFORMATION ON THE SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS CAREER CLUSTER
PLEASE CONTACT YOUR CAMPUS CTE COUNSELOR

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

Mesquite ISD does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following people have been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinators – Chassordee Willie and Emilio Duran, and/or Section 504 Coordinator Amanda Carroll at 3819 Town Crossing Blvd., Mesquite, TX 75150 / 972-288-6411.

Further nondiscrimination information can be found at
[Notification of Nondiscrimination in Career and Technical Education Programs.](#)