Information Technology Career Cluster

The Information Technology (IT) Career Cluster focuses on building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.

Programming & Software Development
Statewide Program of Study

FBISD INSPIRE • EQUIP • IMAGINE | Career & Technical Education

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 any industry or practical purpose. Largely, this is accomplished through guided exploration into creating, modifying, and testing the codes, forms, and scripts that allow computer applications to run.

Secondary Courses for High School Credit

9th Grade
- Computer Science I

10th Grade
- AP Computer Science A

11th Grade
- Computer Science III

12th Grade
- Independent Study

9th – 12th Grade
- AP Computer Science Principles

Postsecondary Opportunities

Associates Degrees
- Computer Programmer
- Computer Software Engineer
- Certified Software Analyst

Bachelor's Degrees
- Management Information Systems, General
- Computer Software Engineer
- Information Science/Studies

Master's, Doctoral, and Professional Degrees
- Computer Software Engineer
- Information Science/Studies

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Join TSA or UIL Computer Science • Job shadow a software engineer	• Earn an IT certification

Industry-Based Certifications

- Python Certified Entry Level Programmer





Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Software Developer	$103,334	2,985	25%
App Developer	$104,499	6,311	30%
Computer Programmer	$79,893	1,454	9%