

Programming and Software Development

Business & Industry Endorsement

The Programming and Software Development program of study explores the occupations and education opportunities associated with designing, developing, and testing operating systems-level software. This includes working on compilers, and network distribution software for medical, industrial, military, communications, aerospace, business, scientific, and general computer applications. The program of study may also include exploration into creating, modifying, and testing the codes, forms, and script that allow computer application to run.

Level I Course



Fundamentals of Computer Science

Principles of Information Technology

Level 2 Course



AP Computer Science Principles

PAP Computer Science

Entrepreneurship I

Level 3 Course



AP Computer Science A

Level 4 Course



Practicum in Entrepreneurship

Industry Based Certifications:

- CompTIA IT Fundamentals
- Unity Certified User Programmer

Recommended Course Sequence:

9th grade

Principles of Information Technology

10th grade

PAP Computer Science &/or AP Computer Science Principles

11th grade

AP Computer Science A

12th grade

Practicum in Entrepreneurship

Postsecondary Opportunities:

Associate Degree:

Web page, Digital Multimedia and Information resource design
Computer Programming

Bachelor's Degree:

Data Science
Computer Engineering

Masters, Doctoral, & Professional Degrees:

Computer Software Engineer

Example Aligned Occupations:

- Computer User Support Specialist
- Software Developer
- Computer Programmers

For detailed course descriptions see the Course Selection Handbook.