

Information Technology

Degree Type

Career Pathways

Information Technology Career Cluster

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

Check with your counselor to see which pathways are offered at your school.

Schools

Battlefield High School,
Brentsville District High School,
Colgan High School,
Forest Park High School,
Freedom High School,
Gainesville High School,
Gar-Field High School,
Hylton High School,
Independence Nontraditional,
Osborn Park High School,
Patriot High School,
Potomac High School,
Unity Reed High School,
Woodbridge High School

Information Support & Services Pathway

Careers in Information Support and Services involve IT deployment, including implementing computer systems and software, providing technical assistance and managing information systems. Successful IT deployment implementation of computer systems and software, provision of technical assistance, creation of technical documentation and management of information systems is critical to the success of most 21st century organizations. People with expertise in Information Support and Services are in high demand for a variety of positions in organizations of all sizes and types, doing work such as integrating multiple databases at a global investment company, enabling employees to share information between the New York, Paris and Hong Kong offices and improving service to customers.

Title	Credits
Digital Applications	1
Computer Information Systems	1
Advanced Computer Information Systems	1
Career Strategies	1

Programming and Software Development Pathway

Careers in Programming and Software Development involve the design development implementation and maintenance of computer systems and software, requiring knowledge of computer operating systems, programming languages and software development. People with expertise in programming and software development work with cutting-edge technologies to develop tomorrow's products for use by businesses and consumers. While many of the career opportunities in this area are in software companies, large organizations of other types such as Financial Services and Business also offer many opportunities. People with expertise in programming and software development are in high demand, doing work such as creating the software that launches and runs NASA space shuttles.

Title	Credits
Programming	1
Advanced Programming	1
Game Design and Development	1
Advanced Game Design and Development	1

Web & Digital Communications Pathway

Careers in Web and Digital Communications involve creating, designing and producing interactive multimedia products and services, including development of digitally-generated or computer-enhanced media used in business, training, entertainment, communications and marketing. Organizations of all types and sizes use digital media to communicate with existing and potential customers, to track transactions, and to collaborate with colleagues. Web and digital communications experts can find employment opportunities in organizations of all sizes and types, doing work such as creating business auction websites that allow people around the world to buy and sell items in real-time.

Title	Credits
Information Technology (IT) Fundamentals	1
Design, Multimedia, and Web Technologies	1
Advanced Design, Multimedia, and Web Technologies	1
Career Strategies	1
Total Credits	4