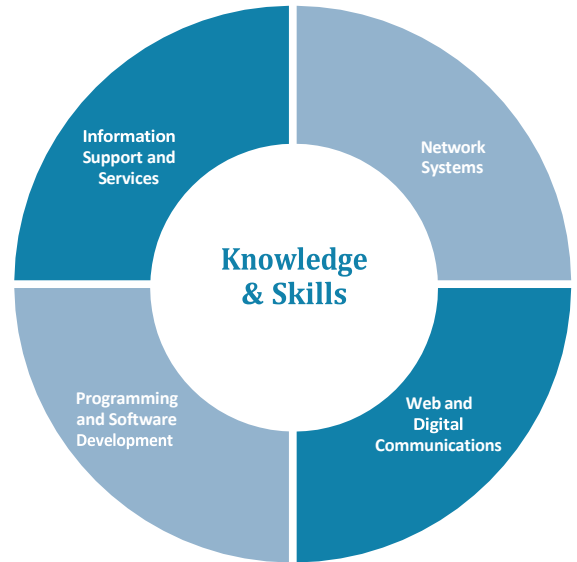


INFORMATION TECHNOLOGY

The Information Technology/Computing Program of Study (POS) involves the design, development, support and management of hardware, software, multimedia and systems integration services. In addition to careers in the IT industry, IT careers are available in every sector of the economy - from Financial Services to Medical Services, Business to Engineering and Environmental Services. Anyone preparing for an IT career should have a solid grounding in math and science. There are obvious connections between Information Technology and other programs of study (please see those in parentheses below for possible opportunities). Pathways in this Program of Study include:

Pathways:

- Information Support and Services
(Arts, AV Technology, and Communications, STEM)
- Network Systems (STEM)
- Programming and Software Development
(Manufacturing, STEM)
- Web and Digital Communications
(Arts, AV Technology, and Communications; Marketing, STEM)



Suggested Learning Experiences

Middle School Electives		
Courses	Grade 7	Grade 8
Additional Electives	<ul style="list-style-type: none"> • Band • Choir • Orchestra • Advanced Art 7 • Exploring AgriScience • Exploring French & Spanish • Online Language Exploration 	<ul style="list-style-type: none"> • Advanced Art 8 • Art 8 • Online Language Exploration • Exploring French & Spanish • French I • Spanish I • Band • Choir • Orchestra • Exploring AgriScience & Gateway Innovation & Robotics

High School Electives				
Courses	Grade 9	Grade 10	Grade 11	Grade 12
Additional Electives	<ul style="list-style-type: none"> • World Languages • AP Human Geography 	<ul style="list-style-type: none"> • World Languages 	<ul style="list-style-type: none"> • World Languages • AP Economics • Psychology AP Psychology 	<ul style="list-style-type: none"> • World Languages
Career & Technical Education	<ul style="list-style-type: none"> • Introduction to Programming • Electronics • Introduction to Engineering Design (PLTW) 	<ul style="list-style-type: none"> • Computer Hardware Systems • Intermediate Programming • Web Design • Digital Publications • Electricity and Electronics 	<ul style="list-style-type: none"> • Computer Networking • TC Business Core • Intermediate Programming • Advanced Web Design 	<ul style="list-style-type: none"> • AP Computer Science • See Work-based Learning Options below

High School Electives Cont.

Courses	Grade 9	Grade 10	Grade 11	Grade 12
English	<ul style="list-style-type: none"> • English I R/H/Essentials 	<ul style="list-style-type: none"> • English II R/H/Essentials • AP Lang/US History 	<ul style="list-style-type: none"> • English III R/H/Essentials • AS Oral and Interpersonal Communication 	<ul style="list-style-type: none"> • AS Written Communication • TC English 101/102 • AP Lit & Comp • Contemporary Media & Lit • English IV Essentials
Math	<ul style="list-style-type: none"> • Essentials I • Algebra I • Geometry 	<ul style="list-style-type: none"> • Essentials II • Geometry • Algebra II 	<ul style="list-style-type: none"> • Adv. Math Applications • Algebra II • Pre-Calculus • AP Statistics 	<ul style="list-style-type: none"> • AS Technical Math • TC Math 105/110 • AP Calculus
Science	<ul style="list-style-type: none"> • Biology • Agriscience • Earth & Space Science 	<ul style="list-style-type: none"> • Chemistry • Earth & Space Science 	<ul style="list-style-type: none"> • AP Biology • AP Chemistry • Physics • AP Environmental Science 	<ul style="list-style-type: none"> • AP Physics
Social Studies	<ul style="list-style-type: none"> • US History & American Gov R/Essentials/AP Government 	<ul style="list-style-type: none"> • American Republic R/Essentials, • AP US History • AP Lang/US History 	<ul style="list-style-type: none"> • World Studies R/Essentials • AP World History • AP European History 	<ul style="list-style-type: none"> • Psychology
Other Required	<ul style="list-style-type: none"> • Computer Applications R/H • Healthy Choices • Physical Education 	<ul style="list-style-type: none"> • Physical Education • Computer Applications R/H 	<ul style="list-style-type: none"> • Consumer & Personal Finance • Physical Education 	<ul style="list-style-type: none"> • Physical Education • Consumer & Personal Finance
Work-Based Learning Options	Business Internship, Youth Apprenticeship			
Other Activities	Arts Club, FBLA, National Honor Society, Pathway Partners Mentoring Program, Skills USA, Youth Service Learning			

INFORMATION TECHNOLOGY

Career Types by Pathway

HIGH SCHOOL DIPLOMA ON-THE-JOB TRAINING	CERTIFICATE/LICENSE	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/DOCTORAL PROFESSIONAL DEGREE
INFORMATION SUPPORT AND SERVICES				
<ul style="list-style-type: none"> Help Desk Assistant 	<ul style="list-style-type: none"> Electronics Technology Information Technology Microsoft Certified Database Administrator Microsoft Office Specialist Oracle Certification Professional 	<ul style="list-style-type: none"> Helpdesk/Microcomputer Support Information Technology Computer Information Systems Database Supports Technical Support 	<ul style="list-style-type: none"> Computer Information Systems Management Information Systems Mass Communication/ Media Studies Web/Multimedia Management 	<ul style="list-style-type: none"> Computer Information Systems Computer Science Management Information Systems
NETWORK SYSTEMS				
<ul style="list-style-type: none"> Network Technician 	<ul style="list-style-type: none"> Cisco Training Electronics Technology Information Technology Microsoft Certified Systems Engineer Certified CompTIA Network+ Certified 	<ul style="list-style-type: none"> Computer and Information Sciences Computer Technology Electronics Technology Information Technology Networking Technology 	<ul style="list-style-type: none"> Computer Science Computer Engineering Computer Systems Analysis Management Information Systems Telecommunications Management 	<ul style="list-style-type: none"> Computer Science Computer Engineering Information Technology Telecommunications Engineering
PROGRAMMING AND SOFTWARE DEVELOPMENT				
	<ul style="list-style-type: none"> Information Technology Computer Programming Vendor/Product Certification 	<ul style="list-style-type: none"> Computer Programming Computer Programming Technology Computer Technology Information Technology 	<ul style="list-style-type: none"> Computer Information Systems Computer Programming Computer Software Engineering Computer Science Management Info Systems 	<ul style="list-style-type: none"> Computer Programming Computer Science Information Resources Management Information Technology System Administration
WEB AND DIGITAL COMMUNICATIONS				
<ul style="list-style-type: none"> Web Designer 	<ul style="list-style-type: none"> Animation Information Technology Multimedia Certified Professional Webmaster CompTIA I-Net+ Certification 	<ul style="list-style-type: none"> Electronic Imaging Information Technology Interactive Media Media Arts Web Development and Support 	<ul style="list-style-type: none"> Commercial Art Computer and Information Sciences Design and Visual Communication Multimedia Communication 	<ul style="list-style-type: none"> Computer Science