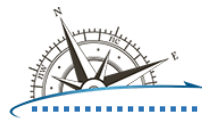


Charting the Course

CLICK THE LINKS BELOW TO EXPLORE...



Career Clusters

- [Agriculture, Food & Natural Resources](#)
- [Architecture & Construction](#)
- [Arts, A/V Technology & Communications](#)
- [Business Management & Administration](#)
- [Education & Training](#)
- [Finance](#)
- [Government & Public Administration](#)
- [Health Science](#)
- [Hospitality & Tourism](#)
- [Human Services](#)
- [Information Technology](#)
- [Law, Public Safety, Corrections & Security](#)
- [Manufacturing](#)
- [Marketing](#)
- [Science, Technology, Engineering & Mathematics \(STEM\)](#)
- [Transportation, Distribution & Logistics](#)

TCE Center Programs

- [Advanced Technology Center](#)
- [Tech Center](#)

High School Academies

- [Entrepreneurship & Business](#)
- [Global Studies & World Languages](#)
- [Governor's STEM & Technology](#)
- [Green Run Collegiate](#)
- [Health Sciences](#)
- [International Baccalaureate](#)
- [Legal Studies](#)
- [Mathematics & Science](#)
- [Visual & Performing Arts](#)

Dual Enrollment Programs

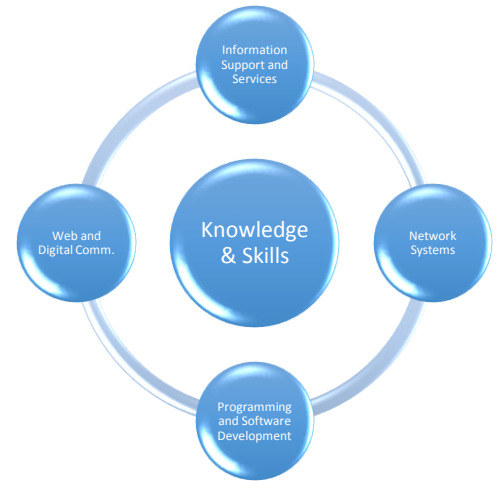
- [Tidewater Community College \(TCC\)](#)

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)



Map pin denotes Virginia Beach Economic Development key industries aligned with career clusters

Suggested Learning Experiences

Middle School Electives	<ul style="list-style-type: none"> • Computer Solutions, Advanced Computer Solutions and Keyboarding
Advanced Studies Diploma Coursework	<ul style="list-style-type: none"> • ENGLISH: Honors sequence meeting graduation requirements • MATH: Algebra I, Geometry, Algebra II or Algebra II Trigonometry, Probability & Statistics and Trigonometry or AP Statistics • SCIENCE: Earth Science, Biology, Chemistry and any 4th science credit • SOCIAL STUDIES: Any sequence meeting graduation requirements
Standard Diploma Coursework	<ul style="list-style-type: none"> • ENGLISH: Any sequence meeting graduation requirements • MATH: Algebra I, Geometry, Algebra II or any 3rd math credit • SCIENCE: Earth Science, Biology and any 3rd science credit • SOCIAL STUDIES: Any sequence meeting graduation requirements
Career Coursework	<ul style="list-style-type: none"> • Computer Information Systems & Advanced, IT Fundamentals, Computer Programming, AP Computer Science
Academy/Center Programs	<ul style="list-style-type: none"> • Advanced Technology Center • Entrepreneurship & Business Academy (Kempsville High School) • Governor's STEM & Technology Academy (Landstown High School)
Industry Certifications	<ul style="list-style-type: none"> • DreamWeaver CS6, Flash CS6, Photoshop CS6, AutoCAD, Autodesk Inventor, 3D Studio Max, MOS Access 2013, MOS Excel 2013 & Excel Expert 1 & 2, MOS OneNote 2013, MOS Outlook 2013, MOS PowerPoint 2013, MOS SharePoint 2013, MOS Word 2013 & Word Expert 1 & 2, Cisco Cert Entry Network Tech-CCENT, Cisco Cert Networking Associate-CCNA, Cisco Interconnecting Cisco Networking Devices, CIW Adv. HTML5 & CSS3, CIW Site Development Foundations, CompTIA A+ Practical Application (220-702 & 802), CompTIA A+ Certification Essentials, CompTIA Network+, CompTIA Security+, ETA Data Cabling Installer Certification, IC3 GS4 Exams (3), Microsoft Certified Technology Specialist (MCTS), MTA Networking Fundamentals, MTA Security Fundamentals, MTA Web Development Fundamentals, NOCTI Computer Programming, Oracle SQL

Student Organizations	<ul style="list-style-type: none"> • FBLA
Career Exploration/ Enrichment	<ul style="list-style-type: none"> • RU Ready • VA Wizard for College & Career Information • VA Career V.I.E.W. for K-8 Career Information • Major Clarity
Co-operative Education/ Internships	<ul style="list-style-type: none"> • Co-op or internship recommended



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 & SERVICES				
Help Desk Assistant	Electronics Technology Information Technology Microsoft Certified Database Administrator Microsoft Office Specialist Oracle Certified Professional	Helpdesk/Microcomputer Support Information Technology Computer Information Systems Database Support Technical Support	Computer Information Systems Management Information Systems Mass Communication/ Media Studies Web/Multimedia Management	Computer Information Systems Computer Science Management Information Systems
NETWORK SYSTEMS				
Network Technician	Cisco Training Electronics Technology Information Technology Microsoft Certified Systems Engineer Certification ComTIA Network+ Certification	Computer & Information Sciences Computer Technology Electronics Technology Information Technology Networking Technology	Computer Science Computer Engineering Computer Systems Analysis Management Information Systems Telecommunications Management	Computer Science Computer Engineering Information Technology Telecommunications Engineering
PROGRAMMING & SOFTWARE DEVELOPMENT				
	Information Technology Computer Programming Vendor/Product Certification	Computer Programming Computer Programming Technology Computer Technology Information Technology	Computer Information Systems Computer Programming Computer Software Engineering Computer Science Management Info Systems	Computer Programming Computer Science Information Resources Management Information Technology System Administration
WEB & DIGITAL COMMUNICATIONS				
Web Designer	Animation Information Technology Multimedia Certified Professional Webmaster CompTIA I-Net+ Certification	Electronic Imaging Information Technology Interactive Media Media Arts Web Development & Support	Commercial Art Computer & Information Sciences Design & Visual Communication Multimedia Communication	Computer Science