

Career Cluster: Information Technology



Information Technology careers involve the design, development, support, and management of hardware, software, multimedia, and systems integration services. The IT industry is a dynamic and entrepreneurial working environment that has a revolutionary impact on the economy and society. IT education can be obtained in four-year colleges, two-year community colleges, technical colleges and institutes, and high schools.

Pathway Descriptions

Information Support and Services careers include implementing computer systems and software, providing technical assistance, creating technical documentation, and managing information systems.

Network Systems careers involve network analysis, planning, and implementation, including design, installation, maintenance, and management of network systems.

Programming and Software Development careers involve designing, implementing, and maintaining computer systems and software. Knowledge in computer operating systems, programming languages, and software development is essential.

Web and Digital Communications careers involve creating, designing, and producing interactive multimedia products and services, including development of digitally-generated or computer-enhanced media.

Preparation for a Career in this Cluster Includes...

Nebraska Career Education Coursework

- Information Technology Applications I
- Information Technology Applications II
- Information Technology Fundamentals
- Information Technology Support
- Network Systems
- PC Support and Maintenance
- Programming I
- Programming II
- Introduction to Digital Design
- Digital Media
- Web Design

Extended Learning

- Maintain a school website
- Future Business Leaders of America (FBLA)
- SkillsUSA
- Prepare school multimedia/video projects
- Create a community web site or promotional video
- Help individuals use a computer
- Set up computers and install software
- Create a webpage
- Job shadow professionals
- Participate in internships
- Secure part-time employment
- Volunteer in this career area



Postsecondary Options: Information Technology

Students preparing for a career in the Information Technology Career Cluster have a variety of postsecondary options. Education and training can be obtained through on-the-job training, technical colleges, two-year community colleges, four-year colleges/universities, and apprenticeship programs. They can enter programs leading to a certificate or a degree at the associate, baccalaureate, or advanced degree level. The table below shows examples of postsecondary Information Technology programs of study organized 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	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 Systems 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 CompTIA Network+ Certification	Computer and 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 and 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 and 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 and Support	Commercial Art Computer and Information Sciences Design and Visual Communication Multimedia Communications	Computer Science



For additional information on the Information Technology Career Cluster please contact:

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