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

For additional Career Cluster Information visit: www.nebraskacareerconnections.org
**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.

<table>
<thead>
<tr>
<th>Pathway</th>
<th>High School Diploma On-the-Job Training</th>
<th>Certificate/License</th>
<th>Associate’s Degree</th>
<th>Bachelor’s Degree</th>
<th>Master’s/Doctoral Professional Degree</th>
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</thead>
<tbody>
<tr>
<td>Information Support and Services</td>
<td>Help Desk Assistant</td>
<td>Electronics Technology Information Technology</td>
<td>Helpdesk/Microcomputer Support Information Technology</td>
<td>Computer Information Systems Management Information Systems</td>
<td>Computer Information Systems Management Information Systems</td>
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<td>Microsoft Office Specialist</td>
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<td>Oracle Certified Professional</td>
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<td>Microsoft Certified Systems Engineer Certification CompTIA Network+ Certification</td>
<td>Networking Technology</td>
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<tr>
<td>Programming and Software Development</td>
<td>Information Technology Computer Programming Vendor/Product Certification</td>
<td>Computer Programming Technology Information Technology</td>
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<tr>
<td></td>
<td>Web Designer</td>
<td>Animation Information Technology Multimedia Certified Professional Webmaster CompTIA I-Net+ Certification</td>
<td>Computer Imaging Information Technology Interactive Media Media Arts Web Development and Support</td>
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<tr>
<td>Web and Digital Communications</td>
<td>Web Designer</td>
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For additional information on the Information Technology Career Cluster please contact:

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