

# Computer Information Systems – Network Communications Technology

## Careers

Opportunities for careers in computer information systems are increasing rapidly as businesses upgrade and add computer networks to improve productivity and meet increased competition in the marketplace. The rapid spread of computers has generated a need for highly trained workers to design and develop new hardware and software systems, maintain networks and incorporate technological advances into new or existing systems.

Network and computer systems administrators design, install and support an organization's local area network (LAN), wide-area network (WAN), Internet, or Intranet system. They provide day-to-day onsite administrative support for software users in a variety of work environments, including professional offices, small businesses, government, and large corporations. They maintain network hardware and software, analyze problems, and monitor the network to ensure security and availability to

system users. These workers gather data to identify customer needs and then use that information to identify, interpret and evaluate system and network requirements. Administrators also plan, coordinate and implement network security measures.

Network administrators are the information technology employees responsible for the efficient use of networks by organizations. They ensure that the design of an organization's computer site allows all the components, including computers, cable plant, switches, routers, servers, and software, to function seamlessly together and work properly. Furthermore, they monitor and adjust performance of existing networks and continually survey the current computer site to determine future network needs. Administrators also troubleshoot problems as reported by users and automated network monitoring systems and make recommendations for enhancements in the construction of future servers and networks.

### Job Outlook

Employment of computer support specialists and systems administrators is expected to increase much faster than the average. Job prospects should be best for those with a college degree and relevant experience. Employment of computer support specialists and systems administrators is expected to increase by 18 percent from 2006 to 2016, which is much faster than the average for all occupations. In addition, this occupation is expected to add 155,000 jobs over the projection decade. Demand for these workers will result as organizations and individuals continue to adopt increasingly sophisticated technology. Job growth will continue to be driven by the ongoing expansion of the computer system design and related services industry, which is projected to remain one of the fastest-growing industries in the U.S. economy.

### Earnings

Median annual earnings of wage-and-salary computer support specialists were \$41,470 in May 2006. The middle 50 percent earned between \$32,110 and \$53,640. The lowest 10 percent earned less than \$25,290, and the highest 10 percent earned more than \$68,540. Median annual earnings of wage-and-salary network and computer systems administrators were \$62,130 in May 2006. The middle 50 percent earned between \$48,520 and \$79,160. The lowest 10 percent earned less than \$38,610, and the highest 10 percent earned more than \$97,080. According to Robert Half Technology, starting salaries in 2007 ranged from \$27,500 to \$37,000 for help-desk workers. Starting salaries for desktop support analysts ranged from \$46,500 to \$65,250. For systems administrators, starting salaries ranged from \$50,000 to \$75,750.

### Related Careers

- Software development
- E-Commerce
- Web design

# Network Communications Careers

## Educational Opportunities in Network Communications Technology at LCCC

The following programs may be completed in two years, if taken on a full-time basis. Many LCCC students choose to study on a part-time basis. Students in the associate of applied business in computer information systems – network communication technology program complete courses in computer information systems, communications, English, math, business administration, accounting, physical science, psychology or sociology, computer diagnostics and repair and Cisco certification.

### *Associate of Applied Business in Computer Information Systems – Network Communications Technology*

This program prepares students for network and microcomputer support positions in business and industry. Students learn to design, install, test and manage local and wide area networks. Additional topics covered in this program are software installation, automated connectivity, security and option CISCO/Cisco Certified Network Associate (CCNA) preparation and Web page design.

### *Associate of Applied Business in Computer Information Systems – Software Development*

This program prepares students for programming on computer platforms from personal computers to mainframes. Students learn to design and develop software using the procedural and object-oriented languages most commonly used in business. Additional topics covered in this program are database design and development and an introduction to networking.

### *Associate of Applied Business in Computer Information Systems – E-Business Technology*

The e-business technology major prepares students for development, administration and support positions in the emerging digital economy. Students learn to design and develop Internet applications in a client/ server environment. Additional topics covered include integrating Internet and enterprise-wide databases, middleware issues, building robust Internet applications and designing dynamic Web portals. A variety of elective courses are available to augment the program.

### *Microsoft Certification*

Enrolling in a Microsoft authorized academic training program and receive certification means you meet Microsoft's highest standards. Certification requirements include passing six examinations which are administered and taught by Microsoft.

### *Cisco Certification*

The computer information systems department is an authorized Cisco Regional Academy. Therefore, you can enroll in Cisco certification classes that will prepare you for the Cisco Certified Network Associate (CCNA) examination. This cluster of four classes can be completed either as credit or non-credit classes. If you are interested in taking the classes and receiving college credit, you must check the credit-course schedule under the computer information systems course heading

## Many of These Programs Qualify for Work-Based Learning:

- Paid internships and co-op job opportunities
- Work experience related to your major
- College credits
- Technical electives
- Career success

### Program Qualifications

- Enrollment in a qualified academic program
- Completion of at least 15 LCCC credit hours with six credits within your major
- An overall GPA of at least 2.0 and at least 2.5 within your major

For more information, contact LCCC Employment and Career Services at (440) 366-4076, e-mail [careers@lorainccc.edu](mailto:careers@lorainccc.edu) or visit [www.lorainccc.edu/careers](http://www.lorainccc.edu/careers).

## About Lorain County Community College

Lorain County Community College is one of Ohio's leading colleges delivering distance learning education via the Internet. The College has expanded its delivery of its programs and services through the opening of the Learning Center at St. Joseph Community Center in Lorain, the LCCC Wellington Center, Lorain County Growth Partnership in downtown Elyria and the Midpoint Campus Center in Brunswick. Partnerships with Lorain County's K-12 school districts have also led to important developments for the community. More than 1300 high school students participate in the Post Secondary Enrollment Options program by enrolling in LCCC classes, making LCCC the state's largest community college provider of PSEO. More than 35 percent of Lorain County's top high school graduates choose to attend LCCC.

LCCC is one of Ohio's fastest growing colleges because of the variety of learning opportunities it provides. Students can choose from more than 80 educational programs. Students can complete the first half — and sometimes more — of a bachelor's degree. The University Partnership brings eight universities to the LCCC campus offering 37 bachelor's and master's degree programs. With the University Partnership at LCCC, the College partners with the state's finest universities to bring the best in bachelor's and master's degree programs right to the LCCC campus. Students can earn degrees that get them jobs immediately. Students can upgrade, retrain and improve current life skills. Students can learn in the classroom, at home and over the Internet.

LCCC offers a complete college experience. We understand that there's more to college life than attending classes. We offer many of the programs, sports, and activities available at large four-year universities and colleges. But, students will not have to stand in line behind juniors and seniors in the classroom, on the playing field, or in leadership positions. Students can immediately act in a play, sing in a musical group, serve as editor for the college newspaper, plan social activities, compete on the playing field, or set policy as a student government member.

In addition to providing a great education for those who enter college with aspirations of a degree, LCCC helps those who have changed their career goals, who want to broaden their horizons, and who want to return to work. LCCC provides learning and training for those who want to move up but find they need new or improved skills for the kind of professional opportunities they seek.

LCCC faculty is recognized locally and nationally for their work as professors and in other areas. They all have advanced degrees and real-world experience and understand their primary responsibility at LCCC is to teach classes. Classes are small. Individual attention is plentiful.

An LCCC education, prepares students for real jobs and real futures. To find out more, call (800) 995-LCCC or visit LCCC's Connections Center, the Learning Center at St. Joseph Community Center in Lorain, the LCCC Learning Center in Wellington, the Lorain County Growth Partnership in downtown Elyria or the Midpoint Campus Center in Brunswick for all of your enrollment service needs, including admissions, registration, advising and counseling.



Lorain County  
Community College



The University  
Partnership

of Lorain County Community College

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