



Cisco Networking Academy: Illinois Profile

Educating the Architects of the Networked Economy

Now in its second decade, Cisco® Networking Academy® has provided more than two million students worldwide with the information technology (IT) and networking skills necessary to compete in the 21st century global economy.

To prepare the Networking Academy for the decade ahead, Cisco has launched innovative new curricula including Cisco Certified Network Associate (CCNA®) Discovery and CCNA Exploration, as well as a new version of IT Essentials called PC Hardware and Software, and updates to the Cisco Certified Network Professional (CCNP®) curriculum. These new courses have been specifically designed to help students be more successful, whether they plan to be IT professionals or are simply seeking a deeper understanding of IT.

Our new courses align to industry certifications, including the recently launched Cisco Certified Entry-Level Technician (CCENT™). In addition to serving as an entry-level certification for employers, CCENT helps meet the new Carl D. Perkins Career and Technical Improvement Act funding requirements.

The new Networking Academy curricula provide seamless educational pathways between secondary and post-secondary institutions and are aligned to national and state education standards for math, science, and language arts. These courses can also help students prepare to pursue degrees related to science, technology, engineering, and math (STEM). In the United States, academies are located in high schools, technical schools, colleges, universities, and community-based organizations with more than 125,000 students enrolled at more than 2300 academies.[†]

As IT continues to be a high-demand job field in the United States, many educational institutions are incorporating IT into their offerings:

- Secondary schools are building pathways for students around the IT career cluster.
- Post-secondary institutions are integrating IT curriculum into degree programs ranging from computer science to networking to business.
- Community colleges and technical schools are providing existing workers with the opportunity to upgrade their skills, pursue additional education, and expand their expertise in technical fields.

Through its proven model of public-private partnerships with education, government, and business, Cisco Networking Academy is addressing the growing need for a pipeline of skilled IT professionals at a time when corporate technology leaders, public sector IT officials, and technology-service-oriented industries are concerned about the lack of a trained technical workforce to fill existing jobs.

[†] Source: AME/MRE FULL Package_10 31 07 Quarterly Metrics_v2 Date: November 28, 2007

An academy has a class currently in session or has taught a class, with at least 3 students, within the last 12 months.

A student is enrolled in a class or has taken a class within the last 12 months.

Learn More

Table 1 lists data about academies in Illinois. Table 2 lists information about Networking Academy curricula in Illinois, and Table 3 shows information by student education level.

For additional information about Cisco Networking Academy, visit <http://www.cisco.com/go/netacad>

Table 1. Cisco Networking Academy in Illinois

Networking Academy students	5747
Distinct cumulative academy students (having successfully completed a course)	24,488
Academy instructors	163
Total estimated cumulative contribution value to Illinois academies*	\$12,743,850

Source: AME/MRE FULL Package_10 31 07 Quarterly Metrics_v2 Date: November 28, 2007

Cumulative students are distinct; therefore, each student is only counted once.

*This estimate includes donations and discounts made to educational institutions implementing Cisco Networking Academy within Illinois.

*Sources: AME/MRE reports 1211_190710.31.07 Date: November 30, 2007

Table 2. Networking Academy Curricula in Illinois

Curriculum	CCNA®	CCNP®	IT Essentials	Security	Wireless
Number of academies by curriculum	74	8	27	6	12

The above curricula represent the core Networking Academy curricula. Panduit Network Infrastructure Essentials, Java, and UNIX are also available.

Academies often teach multiple curricula and may be counted more than once in this table.

Source: AME/MRE rpt 3087 Date: December 5, 2007

Table 3. Illinois Academies and Students by Education Level

Education Level	Number of Illinois Academy Students	Percentage of Illinois Students	Number of Illinois Networking Academies	Percentage of Illinois Academies*
Secondary schools	1774	30%	36	45%
Community colleges	2816	49%	31	38%
Universities	1149	20%	13	16%
Other	8	1%	1	1%
Total by education level	5747	100%	81	100%

Source: AME/MRE FULL Package_10 31 07 Quarterly Metrics_v2 Date: November 28, 2007

Academies represented in "Other" category include the following: community-based organizations, middle schools, the military, nontraditional educational settings, and post-graduate institutions



Cisco Networking Academy: Workforce Development

If the United States is to remain competitive in this global economy, leading experts believe we must have a trained and educated workforce. And yet the number of U.S. students pursuing careers in science, technology, engineering and math—critical areas for educating the workforce of tomorrow—continues to decline.

Cisco Networking Academy addresses this gap by providing students with the skills needed to succeed in the wide range of careers available today and tomorrow. In addition to integrating IT skills, the Networking Academy also embeds math, science, and language arts skills in the curricula.

IT Occupational Data

Table 4 lists information about IT-related occupations in the United States, and Table 5 lists this information for Illinois.

Table 4. Selected IT-Related Occupations in the United States

Occupation	Employment		Employment Change		Average Annual Openings	Occupational Employment as of May 2006*
	2004	2014	Numeric	Percent		
Computer Support Specialists	518,370	637,560	119,190	22	18,300	514,460
Computer Systems Analysts	486,550	639,500	152,960	31	20,800	446,460
Network and Computer Systems Administrators	278,380	385,250	106,870	38	13,770	289,520
Network Systems and Data Communications Analysts	231,270	357,460	126,190	54	15,340	203,710
Computer and Information Systems Managers	280,290	352,920	72,620	25	12,350	251,210

U.S. Department of Labor, Bureau of Labor Statistics, <http://www.bls.gov/oco/oco20024.htm>, based on data availability as of December 2007

*U.S. Department of Labor, Bureau of Labor Statistics, May 2006 State Occupational Employment and Wage Estimates (US), http://stat.bls.gov/oes/current/oes_nat.htm

Table 5. Selected IT-Related Occupations in Illinois

Occupation	Employment		Employment Change		Average Annual Openings	Occupational Employment as of May 2006^
	2004	2014	Numeric	Percent		
Computer Support Specialists	21,670	25,600	3940	18	660	20,750
Computer Systems Analysts	24,650	31,870	7220	29	1000	15,990
Network and Computer Systems Administrators	11,040	14,190	3160	28	440	12,360
Network Systems and Data Communications Analysts	8940	12,740	3800	42	490	7150
Computer and Information Systems Managers	14,220	16,770	2,550	17	510	12,130

U.S. Department of Labor, Bureau of Labor Statistics, <http://www.bls.gov/oco/oco20024.htm>, based on data availability as of December 2007

^ U.S. Department of Labor, Bureau of Labor Statistics, May 2006 State Occupational Employment and Wage Estimates (by state), <http://stat.bls.gov/oes/current/oesrcst.htm>



Illinois Student and Graduate Profile

Derek Murray stepped into the Cisco® Certified Networking Associate (CCNA®) class at the University of Illinois-Springfield (UIS) eager to see what networking was all about. As a result of his experience in the Cisco Networking Academy®, he grew personally, fostered peer relationships, left a positive impact on his university program, and impacted his community through his volunteer work. In 2006, Derek completed the CCNA courses and obtained his CCNA certification. He graduated from UIS with a bachelor's degree in computer science. Currently, Derek works full time at State Farm Insurance as a statistical modeler systems analyst.

As a result of his experience in the Cisco Networking Academy, [Derek] grew personally, fostered peer relationships, left a positive impact on his university program, and impacted his community through his volunteer work.

Derek's interest in technology began at age ten when he received a used computer from an uncle. He was curious to learn how the machine worked, and before long he learned how to program the computer himself. When a dial-up ISP came to his hometown, Derek was one of the first customers to sign up and enjoy the Internet.

Most of Derek's early technical skills came from troubleshooting as he tried to connect to unreliable dial-up networks and debug simple programs. He later used this experience to help out in his junior high computer lab when the school hosted "open lab nights" to provide Internet access to the community. In addition, Derek taught basic computer skills. This solidified his interest in IT as he realized the benefit of helping people do their work more efficiently.

In 2005, while in college, Derek enrolled in the Networking Academy CCNA courses. "He demonstrated high-level, critical thinking skills, grasped new ideas quickly, and produced high quality work," says Janis Rose, academy instructor at UIS. "Derek exemplified the ideals of the Cisco Networking Academy and often offered to explain difficult concepts to help his classmates better grasp the content."

Derek took advantage of every opportunity to advance his job and interpersonal skills, attending seminars on resume building, interviewing techniques, and business etiquette. He completed the CCNA courses in 2006 and obtained his CCNA certification. That same year, he was featured with another student as the first from UIS to be admitted into the State Farm Summer Internship Program and was invited to interview for full time employment at State Farm upon his graduation. Derek's outstanding work helped pave the way for a recruiting relationship between the UIS Computer Science Department and State Farm.

In addition to his studies, Derek dedicates his time giving back to his community. Building on his interest in networking, Derek spends some of his free time volunteering at the Computer Banc where he refurbishes donated computers for financially challenged families with children in grade school. "Seeing the faces of the families and children who receive these computers is very rewarding for me and makes me thankful to be able to help out in some sort of way. I remember when I was first given a computer and the impact it made in my life. Hopefully, I can share some of my time, talent, and fortune with others so that they can go on to a better life," says Derek.



Derek was featured with another student as the first from UIS to be admitted into the State Farm Summer Internship Program and was invited to interview for full time employment at State Farm upon his graduation. Derek's outstanding work helped pave the way for a recruiting relationship between the UIS Computer Science Department and State Farm.

Derek's current role at State Farm Insurance includes designing and writing computer applications for actuaries. Beginning in fall 2008, he intends to pursue a graduate degree in computer science and obtain additional certifications for Cisco IP Telephony and network information security.

For more information on the Cisco Networking Academy at the University of Illinois-Springfield, visit: csc.uis.edu



Active Cisco Networking Academies in Illinois

U.S. Congressional District Database

Data for this report was gathered using the U.S. Congressional District Database. This tool was developed to communicate with congressional representatives about Cisco Networking Academy implementation in their home districts. The database maps actively teaching academies by congressional district or by all districts within a state, providing academy name, city, state, and congressional district. The listing by state is updated annually.

Table 6 lists information about academies in Illinois congressional districts. Custom reports by congressional districts may be run upon request by contacting Melody Buchanan at Melody.Buchanan@ciscolearning.org.

Table 6. Networking Academies in Illinois Congressional Districts

Number of Illinois Congressional Districts	Number of Illinois Congressional Districts <u>with</u> Networking Academies	Number of Illinois Congressional Districts <u>without</u> Networking Academies	% Illinois Congressional District Penetration
19	17	2	89%

Academies listed here have taught a class, with at least one student, within the last six months

Source: MRE/Academy Connection, U.S. Congressional District Database Date: January 3, 2008

Active Illinois Cisco Networking Academies by Congressional District

* Indicates Cisco Networking Academy Training Center

Academies listed here have taught a class, with at least one student, within the last six months

Source: MRE/Academy Connection, U.S. Congressional District Database Date: December 31, 2007

Congressional District 1

- Eisenhower High School (Blue Island)
- Ibew-Neca Technical Institute (Alsip)
- Shepard High School (Palos Heights)
- Evergreen Park Community High School (Evergreen Park)
- Chicago State University (Chicago)

Congressional District 2

- Westwood College Calumet City (Calumet City)
- *South Suburban College - Business & Career Instit (South Holland)

Congressional District 3

- Brother Rice High School (Chicago)
- Queen of Peace High School (Burbank)
- *Moraine Valley Community College (Palos Hills)

- Reavis High School (Burbank)
- Richard J. Daley College (Chicago)
- Richards High School (Oak Lawn)
- Saint Xavier University (Chicago)

Congressional District 6

- *College of Dupage (Regional) (Glen Ellyn)
- Robert Morris College O'Hare (Bensenville)
- Rolling Meadows High School (Rolling Meadows)

Congressional District 7

- International Academy of Design and Technology-Chi (Chicago)
- Jones College Prep High School (Chicago)
- *Robert Morris College Chicago (Chicago)
- Westwood College Chicago CHI (ACC) (Chicago)

Congressional District 8

- College of Lake County (Grayslake)
- Lake County High School Technology Campus (Grayslake)
- Roosevelt University (Schaumburg)
- Robert Morris College Lake County (Waukegan)
- Schaumburg High School (Schaumburg)

Congressional District 9

- Oakton Community College (Skokie)
- Westwood College Chicago CHO (ACC) (Chicago)

Congressional District 10

- Harper College (Palatine)
- John Hersey High School (Arlington Heights)

Congressional District 11

- DeVry University, Chicago Metro (ACC) (Tinley Park)
- Grundy Area Vocational Center (Morris)
- *Heartland Community College (Normal)
- Joliet Junior College CIOS Department (Joliet)

Congressional District 12

- Carbondale Community High School (Carbondale)
- Collinsville Area Vocational Center (Collinsville)
- Murphysboro High School (Murphysboro)
- *Southwestern Illinois College (Granite City)

Congressional District 13

- Carl Sandburg HS (Orland Park)
- Neuqua Valley High School (Naperville)
- Robert Morris College Dupage (Aurora)
- Robert Morris College Orland Park (Orland Park)
- Westwood College Woodridge/Dupage CHD (ACC) (Woodridge)

Congressional District 14

- East Aurora High School (Aurora)

- *Sauk Valley Community College (Dixon)

Congressional District 15

- Bloomington AVC (Bloomington)
- Danville Area Community College (Danville)
- Hoopeston Area High School (Hoopeston)
- Livingston Area Vocational Center (Pontiac)

Congressional District 16

- Auburn High School (Rockford)
- Belvidere High School (Belvidere)
- Guilford High School (Rockford)
- Harlem High School (Machesney Park)
- Jo Davies Area Vocational Center (Elizabeth)
- Kishwaukee College Cisco Networking Academy (Malta)
- *Rock Valley College (Rockford)
- Stillman Valley High School (Stillman Valley)

Congressional District 17

- Black Hawk College (Moline)
- Carl Sandburg College (Galesburg)
- Decatur Area Technical Academy Cisco Academy (Decatur)
- John Wood Community College Academy (Quincy)
- Pana High (Pana)
- Whiteside AVC (Sterling)

Congressional District 18

- *Illinois Central College (Peoria)
- Jacksonville High School (Jacksonville)
- Pekin Community High School (Pekin)
- Richland Community College (Decatur)
- Robert Morris College Springfield (Springfield)
- Woodruff High School (Peoria)

Congressional District 19

- Capital Area Career Center Cisco Academy (Springfield)
- Kaskaskia College (Centralia)
- Lincoln Land Community College (Springfield)
- *Rend Lake College (Ina)
- Rochester High School (Rochester)
- *University of Illinois - Springfield (Springfield)



Cisco Networking Academy: Promoting IT Careers

Technology jobs will not only continue to grow, but the role of information technology (IT) workers will continue to evolve since today nearly every company in every industry relies on IT. The skills learned through Cisco Networking Academy lay a critical foundation for almost any profession, even non-IT careers. Networking Academy graduates not only build careers, but also help build businesses, communities, and countries.

If the United States is to remain competitive and continue to innovate in a global economy, we must foster student interest in pursuing technology- and engineering-related careers. A critical strategy in building a technical workforce for the 21st century is the development of seamless programs like Networking Academy that build pathways between secondary and post-secondary institutions and lead to professional career development.

Through the Cisco Promoting IT Careers initiatives, students are introduced to potential careers in IT and networking and given valuable information about pathways to advanced education, certification, and careers.

Visit the Promoting IT Careers Website, <http://www.cisco.com/go/promoteitcareers>, which is dedicated to the following:

- Increasing awareness and interest in opportunities in IT and networking
- Creating interest in IT and networking as a profession
- Helping students establish career goals
- Providing tools and resources to support success as students pursue IT careers
- Creating opportunities for students and graduates to transition from classroom to careers

Five Ways to Promote IT Careers

The following events and activities engage students at all levels of experience. Valuable tools and resources for each event are available through the Promoting IT Careers Website.

1. Host Your Own All Academy Day

All Academy Day is a competition that gives students the chance to show off the skills they have learned in the Networking Academy and to explore career pathways by interacting with IT professionals. Teams of students participate in a series of hands-on events selected from the following options: cable making, component identification, computer building, home networking, quiz bowl, router configuration, TAC/professionalism, and virtual computers. For more information, visit: <http://www.cisco.com/go/allacademyday>

2. Help Students See Your Shadow

Job shadowing can be an important first step in pointing students toward IT careers. You can put on a full **Job Shadow Day** or offer an event as simple as a guest speaker in your classroom. Hearing first-hand about the world of work from IT professionals helps students relate their classroom experiences to the workplace and can inspire students to pursue careers in math, science, and technology. For more information, visit: <http://www.cisco.com/go/jobshadow>

3. Introduce Young Students to the World of IT

Packetville is a public e-learning portal filled with interactive and educational resources for introducing students aged 8 to 14 to the world of IT. Lesson plans, which are aligned with the standards of the International Society for Technology in Education, include community service projects and career exploration. For more information, visit:

<http://www.cisco.com/go/packetville>

4. Connect Students with Employers

The Networking Academy is connecting Networking Academy alumni with employers through the Career Connection job board. For more information, visit: <http://cc.netacad.net/home.do>

5. Explore the Landscape of IT

This series of **Virtual Field Trips** helps Networking Academy students and instructors explore and understand the landscape of IT and prepare for networking careers, all without leaving the classroom. Designed to engage students early on in their Networking Academy experience, the videos cover a range of topics that encourage students to continue their education and begin early to build their career path. A companion module that accompanies each video reinforces the content from the video. For more information, visit: <http://www.cisco.com/go/virtualfieldtrip>

Learn More about IT and Networking Careers

- Certification Magazine, “Hot Jobs & Skills for 2007”
http://www.certmag.com/articles/templates/CM_gen_Article_template.asp?articleid=2521&zoneid=1
- CNNMoney.com, “Skilled Worker Shortage Hurts U.S.”
http://money.cnn.com/2007/01/04/news/economy/jobs_outlook/index.htm
- Job Data Resources
 - U.S. Department of Labor Bureau of Labor Statistics, Occupational Employment Statistics
<http://data.bls.gov/oes/search.jsp>
 - State-Level Job Projections
<http://www.projectionscentral.com>
- John Chambers on the role of technology in education
http://www.forbes.com/opinions/2008/01/23/solutions-education-chambers-oped-cx_sli_0123chambers.html
- “The Quiet Crisis,” Shirley Ann Jackson, Ph.D.; President, Rensselaer Polytechnic Institute
<http://www.rpi.edu/homepage/quietcrisis/>



Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

Europe Headquarters
Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: +31 0 800 020 0791
Fax: +31 0 20 357 1100

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

CCVP, the Cisco logo, and Welcome to the Human Network are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networkers, Networking Academy, Network Registrar, PIX, ProConnect, ScriptShare, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries. Mind Wide Open is a trademark of Cisco Networking Academy.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0711R)