

Cisco Networking Academy Program

Fundamentals of Voice and Data Cabling
Sponsored by Panduit Corporation

Changing the Way People Learn

The Cisco Networking Academy™ Program is a comprehensive e-learning program, which provides students with the Internet technology skills essential in a global economy. The Networking Academy program delivers Web-based content, online assessment, student performance tracking, hands-on labs, instructor training and support, and preparation for industry- standard certifications.

Launched in 1997, there are over 10,000 Networking Academies in 149 countries. Over 400,000 students are enrolled in Academies in high schools, colleges and universities, technical schools, community-based organizations, and other educational programs around the world.

The Networking Academy Curriculum

The Networking Academy curriculum gives students at educational institutions and in-transition workers, in-demand Internet technology skills for designing,

building and maintaining networks.

Combining instructor-led, online education with hands-on laboratory exercises, the curriculum enables students to apply what they learn in class while working on actual networks. From building a Web site to basic networking skills to advanced VLAN troubleshooting, the Networking Academy curriculum prepares students for lifelong opportunities in the real world.

Curriculum success is rooted in the educational ecosystem that Cisco creates through its partnerships with schools and colleges, businesses, nonprofit organizations, international organizations, unions, and government agencies. This ecosystem allows the Networking Academy curriculum to feature optional courses, sponsored by IT industry leaders, in: UNIX; Java Programming; Web Design; PC Hardware and Software: Network Operating Systems; and Voice and Data Cabling.

Panduit Corporation, dedicated to providing complete copper and optical fiber cabling systems for the enterprise and service providers, is a world leader in network connectivity solutions. Panduit is partnering with the Cisco Networking Academy Program by sponsoring a course on cabling for voice and data.

Fundamentals of Voice and Data Cabling
Fundamentals of Voice and Data Cabling, sponsored by Panduit Corporation, gives Cisco Networking Academies the

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opportunity to provide a curriculum on the physical aspects of voice and data network cabling and installation. This 70-hour, hands-on, lab-oriented course stresses documentation, design and installation issues, laboratory safety and on-the-job safety, as well as working effectively in group environments. Students will become familiar with cabling issues related to data and voice connections, media and transmissions practices, and cabling customer support. This course provides an overview of cabling and networking industry standards as well as emerging cabling technologies. The Fundamentals of Voice and Data Cabling also helps prepare students for opportunities in the networking field ranging from cabling technician to network maintenance to overall network management.

Fundamentals of Voice and Data Cabling Competencies

Upon successful completion of this course, students will receive a Certificate of Completion for the *Fundamentals of Voice and Data Cabling*. The Communications Workers of America (CWA) have reviewed this course and have allowed us to include their endorsement stamp on this certificate.

Acquired competencies include an understanding of:

- Cabling industry and marketplace as well as US and international standards and worldwide standards organizations.
- Basic networking concepts and topologies, the OSI model and the main functions of each model layer.
- Signal transmission, basics of electrical and optical transmission theory, basic wireless systems theory, and the cause and effects of signal degradation.
- Schematics of copper cabling in the form of twisted-pair and shielded twisted-pair, as well as the respective standards and coaxial cable schematics.
- Fiber optics using cabling, different modes of fiber optics and implications of dispersion and attenuation.
- Essential lab safety principles and local, national and international safety code of conduct.
- Cabling installation as well as rough-in, trim-out and finish phases.

Industry-Recognized Certification

Fundamentals of Voice and Data Cabling, along with additional course materials and work experience helps to prepare students for the BICSI Registered Installer, Level 1 exam.

Comprehensive Internet Skills for Economic Growth According to a May 2002 ITAA report, there will be a demand for more than 1.1 million new IT jobs in the next year with almost 600,000 jobs going unfilled due to a lack of qualified workers. The report also found that the five hottest, most in demand jobs now and in the future are technical support, network design and administration, programming and software engineering, web development, and database development and administration. Moreover, a recent study conducted by Fairfield Research, Inc. and *Certification Magazine* on the correlation between industry certifications and earning power shows that, “the more certifications the IT professional has, the more he or she tends to get paid.” (*Certification Magazine*, “CertMag’s Salary Survey,” by Gary Gabelhouse, December, 2001.)

The *Fundamentals of Voice and Data Cabling* course expands and strengthens the Cisco Networking Academy curriculum, which prepares students for industry standard, as well as vendor neutral certifications. These include Cisco Certified Network Associate (CCNA™); Cisco Certified Network Professional (CCNP™); A+, Linux+, Network+, Server+ certifications, administered by CompTIA, Sun Certified Programmer for Java 2 Platform, and Certified Web Designer Associate administered by The World Organization of Webmasters (WOW). Bottom line—the Networking Academy curriculum enriches the skill set required to succeed in a changing economy.

Visit the following Web sites for more information on:

Cisco Networking Academy Program

www.cisco.com/edu/academy

Locating a Networking Academy

www.cisco.com/edu/academylocator

Cisco Workplace Learning Initiatives

wpl.netacad.net



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