

Cisco Networking Academy Program

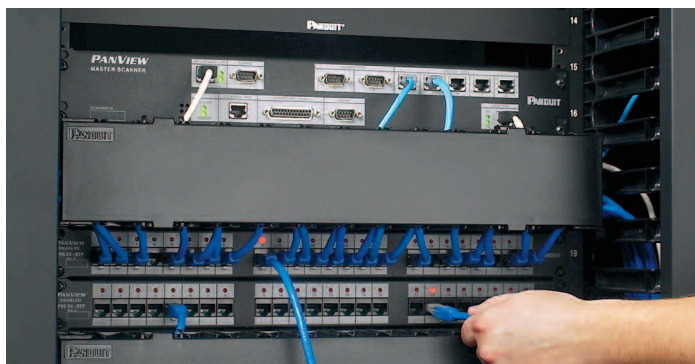
Panduit Network Infrastructure Essentials Sponsored by Panduit Corporation

The Cisco® Networking Academy® Program offers valuable networking and IT skills to students and workers worldwide who want to expand their IT knowledge or consider a career in the high-tech industry. The Networking Academy program also fosters local economic growth by providing innovative IT curricula, as well as development and support to technical education instructors, helping to create an IT-skilled workforce.

Changing the Way People Learn

More than one million students have successfully completed Cisco Networking Academy courses in high schools, colleges and universities, technical and military schools, and community-based educational organizations around the world. The courses use a blended learning model to integrate face-to-face teaching with challenging Web-based curricula, hands-on lab exercises, and an Internet-based assessment tool.

Since being launched in 1997, the program has reached more than 10,000 educational institutions in more than 150 countries, with curricula taught in nine languages. This industry-leading program provides an educational framework that prepares Networking Academy graduates for networking and IT-related careers in the public and private sectors, as well as for higher education in engineering, computer science, and related fields.



Panduit is a global leader in Networking Infrastructure.

Students learn the essentials of setting up and maintaining the physical layer of the network, giving them the expertise to keep a network stable, safe, and reliable.

Panduit Network Infrastructure Essentials

Panduit Corporation, a world leader in network and electrical solutions, manufactures high-quality products for wiring and communications applications. Panduit is partnering with the Cisco Networking Academy program by sponsoring a new customer-driven Panduit Network Infrastructure Essentials (PNIE) course.

The new course, which replaces Panduit’s Fundamentals of Voice and Data Cabling course, provides hands-on training and new innovations for students who are interested in successfully mastering the physical layer of a network, where 70 percent of all network problems occur.

Panduit Network Infrastructure Essentials gives Cisco Networking Academies the opportunity to provide a curriculum on the installation and management of the physical layer of a network. This 70-hour, lab-oriented course focuses on cable management and installation, documentation, design, laboratory safety and on-the-job safety, and how to work effectively in groups.

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.

By providing instruction in the most up-to-date practices in cabling, grounding, and physical layer management, the course helps prepare students for opportunities in the networking field. Career options range from cabling technician and network maintenance positions to over-all network management. The successful completion of this course is a critical differentiator in a job market where more than 100,000¹ companies worldwide require individuals with structured cabling expertise.

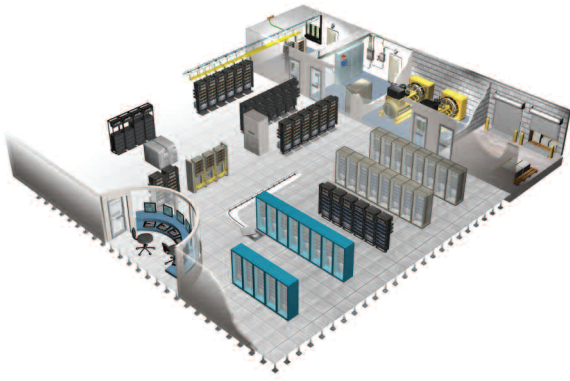
Panduit Network Infrastructure Essentials Competencies

Students receive a Certificate of Course Completion when they successfully complete the PNIE course.

Acquired competencies include an understanding of:

- Cabling industry and marketplace as well as U.S. and international standards and worldwide standards organizations

1. Source: PNIE Course Overview Presentation, Panduit Corporation, 2004.



A solid network infrastructure provides the dependability needed to keep a data center running efficiently.

- 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 codes of conduct
- Cabling installation processes as well as rough-in, trim-out, and finish phases
- Physical layer management

Meaningful Industry Certification

PNIE will prepare students for the Panduit Authorized Installer (PAI) exam. The PAI designation is recognized by more than 2000 global companies as the certification needed in Panduit installations.²

Comprehensive Internet Skills for Economic Growth

The PNIE course expands and strengthens the Cisco Networking Academy curricula. This course is a strong complement to the CCNA® curriculum and teaches student how to create the entire physical layer of a network from the cables and routers to the switches.

Networking Academy Curriculum Overview

The PNIE course, as well as all other Networking Academy curricula, is taught by trained instructors in each Networking Academy who deliver standards-based, high-quality content in specially equipped labs, where students practice hands-on exercises to apply the concepts

they learn. Cisco updates the curricula regularly to encompass new technologies and improved instructional techniques.

The Networking Academy courses prepare students for a variety of careers in network design and administration, technical support, PC maintenance, and Java programming.

The associate-level CCNA course covers the foundations of networking and promotes each student's expertise in this area. The professional-level CCNP® certification course builds on CCNA with more complex network configurations, network diagnosis, and troubleshooting.

The Network Security course teaches students how to design and implement security solutions to reduce the risk of revenue loss and vulnerability resulting from breaches in network security. The Fundamentals of Wireless LANs is an introductory course that covers the design, planning, implementation, operation, and troubleshooting of wireless networks.

Additional Academy courses include HP IT Essentials I and II, sponsored by Hewlett Packard, which cover PC maintenance and support as well as network operating systems; Fundamentals of Java Programming; and Fundamentals of UNIX.

The Cisco Networking Academy courses prepare students for industry-standard certifications as well as vendor-neutral certifications, as shown in the following table:

Networking Academy Course	Certification
CCNA modules 1–4	CCNA
CCNP modules 1–4	CCNP
Fundamentals of Java Programming	Sun Certified Programmer for Java™ 2 Platform
Fundamentals of UNIX	CompTIA Linux+ (when combined with HP IT Essentials II)
HP IT Essentials I: PC Hardware and Software	CompTIA A+
HP IT Essentials II: Network Operating Systems	CompTIA Linux+ (when combined with Fundamentals of UNIX)
Network Security	Cisco Firewall Specialist
Panduit Network Infrastructure Essentials (PNIE)	Panduit Authorized Installer (PAI)

Visit the following Websites for more information:

Cisco Networking Academy Program overview: www.cisco.com/go/netacad.

More information on courses: www.cisco.com/edu/courses.

Find an Academy near you: www.cisco.com/edu/locate.

PAI registration page: www.cisco.com/edu/PAI.

2. Source: Panduit Corporation, 2005.

