

Cisco Networking Academy Program Fundamentals of Network Security

Changing the Way People Learn

Launched in 1997, the Cisco Networking Academy® Program has grown to more than 10,000 Academies in all 50 United States and more than 150 countries, with a curriculum taught in 9 languages. More than 400,000 students participate in Academies in high schools, colleges and universities, technical schools, community-based organizations, and other educational programs around the world.

The Academy program utilizes a blended learning model, integrating face-to-face teaching with a challenging Web-based curriculum, hands-on lab exercises, and Internet-based assessment. Academy graduates are prepared 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.

The Networking Academy Curriculum

Each Academy has certified instructors who deliver standards-based, high-quality curriculum in specially equipped Academy labs, where students practice on standard equipment, enabling them to apply what they learn. The curriculum is regularly updated with information about new technologies and improved instructional techniques. From building a Website to basic networking skills to VLAN troubleshooting, the Networking Academy curriculum prepares students for lifelong opportunities in the real world.

Academies offer a range of courses for a variety of careers in network design and administration, technical support, programming or software engineering, database development and administration, and Web development. The associate-level CCNA® course covers the basic foundation of networking. The professionallevel CCNP® course builds on CCNA with more complex network configurations, and network diagnosis and troubleshooting. The Fundamentals of Network Security course teaches students to design and implement security solutions to reduce the risk of revenue loss and vulnerability. Fundamentals of Wireless LANs is an introductory course about the design, planning, implementation, operation, and troubleshooting of wireless networks. Additional courses sponsored by IT industry leaders include:

- Fundamentals of Web Design, sponsored by Adobe (available in the US only)
- IT Essentials I: PC Hardware and Software and IT Essentials II: Network Operating Systems, sponsored by Hewlett-Packard

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- Fundamentals of Voice and Data Cabling, sponsored by Panduit
- Fundamentals of UNIX and Fundamentals of Java Programming, sponsored by Sun Microsystems

Fundamentals of Network Security

There has never been a greater need for professionals trained in network security. In today's world, everything is a target—from routers and switches to applications and even poorly managed security devices. Companies are frequently attacked through their connections to remote users or business partners with a less stringent security policy or implementation. Companies, governments, and organizations must guard against hackers, outsiders, and even disgruntled employees who threaten their information security, integrity and daily business operations.

Fundamentals of Network Security is designed to prepare students for certification in this field. Faculty, students, and university and college administrators have requested a course that teaches students to design and implement security solutions to reduce the risk of revenue loss and vulnerability. This course combines hands-on experience, instructor-led lectures, and a Web-based curriculum for students.

The 70-hour course is an introduction to network security and overall security processes. Acquired course competencies include:

- Select appropriate security hardware, software, policies, and configurations based on an organization's assessment of its security vulnerabilities in order to provide protection against known security threats.
- Perform advanced installation, configuration, monitoring, troubleshooting, maintenance, and recovery on Cisco IOS® and PIX® firewalls
- Configure intrusion detection feature on the Cisco IOS router and PIX firewalls.
- Install and configure CSACS for AAA service on Cisco IOS and PIX firewalls.
- Configure site-to-site VPNs between Cisco devices and remote access VPNs between Cisco device and clients to ensure privacy and confidentiality.

The Network Security course advances students on a career path toward the following occupations: network security analyst, senior systems analyst, and systems architect. For higher-education bound students, this course prepares them for electrical engineering or computer and management information systems degree programs.

Industry-Recognized Certifications

Fundamentals of Network Security readies students to take the SECUR (Securing Cisco IOS Networks) and CSPFA (Cisco Secure PIX Firewall Advanced) exams in preparation for the Cisco Firewall Specialist. These exams also count toward security—professional-level CCSP™ certification. Successful completion of the course also helps prepare students for the CompTIA Security+ exam and for further network security study.

Comprehensive Internet Skills for Economic Growth

IT is a growing industry, essential to economic and business development. According to IDC analysts: The IT industry will grow by 6 to 7 percent in 2004 and the Internet will have one billion users by 2006 and support \$6 trillion (USD) in commerce. New technologies such as converged devices, smart handhelds, wireless games, embedded devices in every day durable goods will be on the rise.

A study conducted by Fairfield Research, Inc. and *Certification Magazine* on the correlation between industry certifications and earning power reveals, "the more certifications the IT professional has, the more he or she tends to get paid." (Gary Gabelhouse, "CertMag's Salary Survey," *Certification Magazine*, December, 2001.)

The Cisco Networking Academy Program prepares students for industry standard certifications as well as vendor neutral certifications. These include CCNA; CCNP; Cisco Firewall Specialist; Cisco Wireless LAN Support Specialist; A+, Linux+, Network+, Security+, 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) (US only).

Visit the following Websites for more information on:

Cisco Networking Academy Program www.cisco.com/edu/academy

Locating a Networking Academy www.cisco.com/edu/academylocator

Cisco Education Information www.cisco.com/edu

Cisco Career Connection www.cisco.com/go/careerconnection

More information on courses cisco.netacad.net/public/academy/catalog

