

# Cisco Networking Academy Program Fundamentals of **Wireless LANs**

## 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.

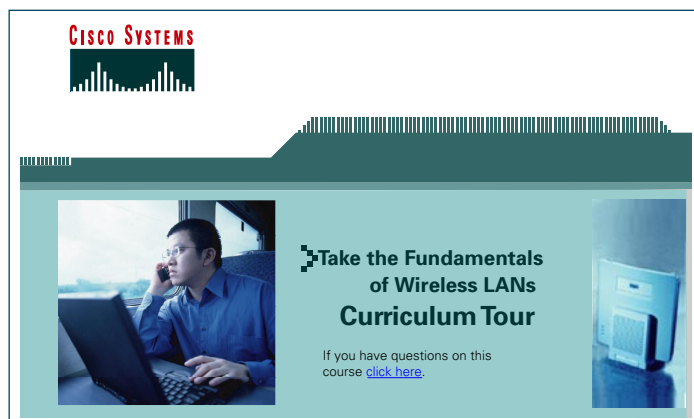
The Academy program utilizes a blended learning model, integrating face-to-face teaching with a challenging Web-based curriculum, hands-on lab exercises, and Internet-based assessment. Academy graduates are prepared for networking and IT-related careers in the public and private sectors, as well as for 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 professional-level 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,

### Fundamentals of Wireless LANs



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

### Fundamentals of Wireless LANs

As organizations increasingly depend on wireless technologies in their everyday practices, the *Fundamentals of Wireless LANs* course teaches students to develop, implement, and troubleshoot wireless networks. This 70-hour hands-on, skills-based course focuses on the design, planning, implementation, operation, and troubleshooting of wireless networks. It covers a comprehensive overview of technologies, security, and design best practices. Acquired competencies include:

- Design a logical wireless LAN architecture for mobile wireless users in compliance with IEEE 802.11 standards.
- Demonstrate knowledge of the theory regarding the most common factors that influence WLANs (including EM spectrum, radio wave propagation, modulation techniques, and frequency and channel usage in wireless technologies).
- Installation of in-building and building-to-building WLANs with Cisco devices and appropriate antennas that meet mobility and throughput specifications, including the site survey and documentation.
- Perform hardware setup and software configuration of Cisco Aironet wireless products including security using WEP, Cisco LEAP, and 802.1x protocols.
- Upgrade wireless products and troubleshoot performance issues using event logging, command-line utilities, and diagnostic tools.

The Wireless LANs course advances students on a career path toward the following occupations: systems engineer, product support engineer, and systems integrator. 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 Wireless LANs* course helps students to achieve the Cisco Wireless LAN Support Specialist designation (WLANFE).

### 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 everyday 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](http://www.cisco.com/edu/academy)

Locating a Networking Academy  
[www.cisco.com/edu/academylocator](http://www.cisco.com/edu/academylocator)

Cisco Education Information  
[www.cisco.com/edu](http://www.cisco.com/edu)

Cisco Career Connection  
[www.cisco.com/go/careerconnection](http://www.cisco.com/go/careerconnection)

More information on courses  
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