



## CCNA Security

### Opportunity

The Internet is changing life as we know it – bringing new economic and social opportunities to communities throughout the world, and increasing the global demand for information and communication technology (ICT) skills. Security and risk management skills are among the most highly sought after skills in networking, and demand continues to grow. Organizations around the world are experiencing a shortage of qualified ICT candidates with the specialized knowledge and skills needed to administer devices and applications in a secure infrastructure, recognize network vulnerabilities, and mitigate security threats. In a recently commissioned study conducted by Forrester Consulting on behalf of Cisco, dedicated security roles are expected in 80 percent of the companies studied worldwide within five years.

### Solution

The Cisco® Networking Academy® CCNA® Security course provides a next step for individuals who want to enhance their CCNA-level skill set and help meet the growing demand for network security professionals. The curriculum provides an introduction to the core security concepts and skills needed for the installation, troubleshooting, and monitoring of network devices to maintain the integrity, confidentiality, and availability of data and devices.

CCNA Security is a hands-on, career-oriented e-learning solution with an emphasis on practical experience to help students develop specialized security skills, along with critical thinking and

complex problem solving skills. The curriculum helps prepare students for entry-level security career opportunities and the globally recognized Cisco CCNA Security certification, which helps students differentiate themselves in the marketplace with specialist skills to advance their careers.

**“80 percent of the companies studied worldwide expect to have a dedicated security role within five years.”**  
— Forrester Research

### Features

CCNA Security provides an in-depth, theoretical, and hands-on introduction to network security, in a logical sequence driven by technologies. CCNA Security includes the following features:

- Students develop an in-depth, theoretical understanding of network security principles as well as the tools and configurations available.
- The courses emphasize the practical application of skills needed to design, implement, and support network security.
- Hands-on labs help students develop critical thinking and complex problem-solving skills.
- Packet Tracer simulation-based learning activities promote the exploration of networking security concepts and allow students to experiment with network behavior and ask “what if” questions.
- Innovative assessments provide immediate feedback to support the evaluation of knowledge and acquired skills.



Who Should Enroll	Prerequisites
<ul style="list-style-type: none"> <li>• College and university-level students seeking career-oriented, entry-level security specialist skills</li> <li>• IT professionals wishing to broaden or add specialized skills to their technology expertise</li> <li>• Current CCNA certification holders who wish to build on their CCNA knowledge base</li> </ul>	<ul style="list-style-type: none"> <li>• CCNA-level networking concepts and skills</li> <li>• Basic PC and Internet navigation skills</li> <li>❖ Students can acquire the CCNA-level routing and switching skills needed for success in this course by completing CCNA Discovery or CCNA Exploration</li> </ul>



## Learning Environment

CCNA Security can be delivered as an independent curriculum or integrated into a broader course of study, such as technology or continuing education programs. The curriculum can be offered in an in-person or a blended distance learning (BDL) environment.

All hands-on labs in the course can be completed on actual physical equipment or in conjunction with the NDG NETLAB solution, which provides remote access to equipment over the Internet.

## CCNA Security Certification

CCNA Security helps prepare students for the Implementing Cisco IOS® Network Security (IINS) certification exam (640-553) leading to the Cisco CCNA Security certification. With a CCNA Security certification, an individual demonstrates the skills required to develop a security infrastructure, recognize network threats and vulnerabilities, and mitigate security threats.

## Careers

CCNA Security supports students who plan to start a career, build a career, or switch focus in an IT networking career to security technologies. The curriculum emphasizes practical experience to help students develop the skills needed for job roles such as network security specialists, security administrators, and network security support engineers. The CCNA Security curriculum is designed to meet the needs of today's IT professionals.

## Minimum System Requirements

CCNA Security curriculum requirements:

- 1 Student PC per student; 1 local curriculum server

## Lab bundle requirements for CCNA Security:

Description	Mfr	Part Number	Qty
Modular Router w/2xFE, 2 WAN slots, 32 FL/128 DR	Cisco	CISCO1841	3
192MB SODIMM DRAM factory upgrade for the Cisco 1841	Cisco	MEM1841-64D	2
64MB Cisco 1800 Compact Flash Memory	Cisco	MEM1800-64CF	2
2-Port Async/Sync Serial WAN Interface Card	Cisco	WIC-2A/S or WIC-2T	3
V.35 Cable, DTE Male to Smart Serial, 10 Feet	Cisco	CAB-SS-V35MT	2
V.35 Cable, DCE™ Female to Smart Serial, 10 Feet	Cisco	CAB-SS-V35FC	2
Catalyst 2960 24 10/100 + 2 1000BT LAN Base Image	Cisco	WS-C2960-24TT-L	3
(Optional) Rackmount Kit for the 1841	Cisco	ACS-1841-RM-19	3
Cisco IOS Release 12.4(20)T1 - Advanced IP Services	Cisco	c1841-advipser-vicesk9-mz.124-20.T1.bin	2

**Note:** The equipment listed above is the minimum set and can be substituted by other Cisco models with equal or higher specifications.

CCNA Security encourages students to explore networking concepts using tools such as Packet Tracer. Packet Tracer is a powerful network simulation tool developed by Cisco that allows students to experiment with network behavior and develop critical thinking, collaboration, and problem solving skills, while gaining practical knowledge.

## Cisco Networking Academy

In partnership with schools and organizations around the world, the Cisco Networking Academy program delivers a comprehensive learning experience to help students develop information and communication technology (ICT) skills for entry-level career opportunities, continuing education, and globally recognized career certifications. The curricula also help students build 21st century skills such as collaboration and problem solving by encouraging practical application of knowledge through hands-on activities and network simulations.

Networking Academy teaches ICT skills to students from virtually every socioeconomic background and region of the world. Students gain the skills needed to pursue networking careers in a variety of industries such as technology, healthcare, financial services, fashion, entertainment, and more. Students also gain access to a global support group, career developments tools, and social networking resources to help them become architects of the human network.

## For More Information

Cisco Networking Academy  
[www.cisco.com/go/netacad](http://www.cisco.com/go/netacad)

Course Catalog  
[www.cisco.com/go/netacadcourses](http://www.cisco.com/go/netacadcourses)

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