Security and risk management skills are among the most highly sought after skills in networking, and global demand continues to grow. Organizations around the world are experiencing a shortage of qualified information and communication technology (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.

CCNA Security
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 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.
- Can be delivered in-person or in a blended distance learning (BDL) environment

Course Description
CCNA Security is a hands-on, career-oriented e-learning solution with an emphasis on practical experience to help students develop specialized security skills to advance their careers. The curriculum helps prepare students for entry-level security career opportunities Implementing Cisco IOS® Network Security (IINS) certification exam (640-554) leading to the Cisco® CCNA Security certification.

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.

Who Should Enroll
- College and university-level students seeking career-oriented, entry-level security specialist skills
- IT professionals wishing to broaden or add specialized skills to their technology expertise
- Current CCNA certification holders who wish to build on their CCNA knowledge base

Prerequisites
- CCNA-level networking concepts and skills
- Basic PC and Internet navigation skills
- Students can acquire the CCNA-level routing and switching skills needed for success in this course by completing CCNA Discovery or CCNA Exploration
# CCNA Security

## Course Outline

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Modern Network Security Threats</td>
<td>• Explain network threats, mitigation techniques, and the basics of securing a network</td>
</tr>
<tr>
<td>2. Securing Network Devices</td>
<td>• Secure administrative access on Cisco routers</td>
</tr>
<tr>
<td>3. Authentication, Authorization and Accounting</td>
<td>• Secure administrative access with AAA</td>
</tr>
<tr>
<td>4. Implementing Firewall Technologies</td>
<td>• Implement firewall technologies to secure the network perimeter</td>
</tr>
<tr>
<td>5. Implementing Intrusion Prevention</td>
<td>• Configure IPS to mitigate attacks on the network</td>
</tr>
<tr>
<td>6. Securing the Local Area Network</td>
<td>• Describe LAN security considerations and implement endpoint and Layer 2 security features</td>
</tr>
<tr>
<td>7. Cryptography</td>
<td>• Describe methods for implementing data confidentiality and integrity</td>
</tr>
<tr>
<td>8. Implementing Virtual Private Networks</td>
<td>• Implement secure virtual private networks</td>
</tr>
<tr>
<td>9. Managing a Secure Network</td>
<td>• Given the security needs of an enterprise, create and implement a comprehensive security policy</td>
</tr>
<tr>
<td>10. Implementing the Cisco Adaptive Security Appliance (ASA)</td>
<td>• Implement firewall technologies using the ASA to secure the network perimeter</td>
</tr>
</tbody>
</table>

---

**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.

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 healthcare, technology, 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)

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

Locate an academy  
[www.cisco.com/go/academylocator](http://www.cisco.com/go/academylocator)

Certifications  
[www.cisco.com/go/certifications](http://www.cisco.com/go/certifications)