

# CompTIA Security+

Duration 5 Days



## COURSE OVERVIEW

In this course, students will implement, monitor, and troubleshoot infrastructure, application, information, and operational security. Students will prepare for the CompTIA Security+ certification examination (SY0-501).

## COURSE OBJECTIVES

In this course, you will implement information security across a variety of different contexts.

You will:

- Identify the fundamental components of information security.
- Analyze risk.
- Identify various threats to information security.
- Conduct security assessments to detect vulnerabilities.
- Implement security for hosts and software.
- Implement security for networks.
- Manage identity and access.
- Implement cryptographic solutions in the organization.
- Implement security at the operational level.
- Address security incidents.
- Ensure the continuity of business operations in the event of an incident.

## TARGET AUDIENCE

This course is targeted toward the information technology (IT) professional who has networking and administrative skills in Windows®-based Transmission Control Protocol/Internet Protocol (TCP/IP) networks; familiarity with other operating systems, such as macOS®, Unix, or Linux; and who wants to further a career in IT by acquiring foundational knowledge of security topics; preparing for the CompTIA Security+ certification examination; or using Security+ as the foundation for advanced security certifications or career roles.

## PREREQUISITES

- CompTIA Network+ Certification
- CompTIA A+ Certification
- Using Microsoft Windows 8.1
- Microsoft Windows 8.1: Transition from Windows 7



## COURSE OUTLINE

### 1 - IDENTIFYING SECURITY FUNDAMENTALS

- Identify Information Security Concepts
- Identify Basic Security Controls
- Identify Basic Authentication and Authorization Concepts
- Identify Basic Cryptography Concepts

### 2 - ANALYZING RISK

- Analyze Organizational Risk
- Analyze the Business Impact of Risk

### 3 - IDENTIFYING SECURITY THREATS

- Identify Types of Attackers
- Identify Social Engineering Attacks
- Identify Malware
- Identify Software-Based Threats
- Identify Network-Based Threats
- Identify Wireless Threats
- Identify Physical Threats

### 4 - CONDUCTING SECURITY ASSESSMENTS

- Identify Vulnerabilities
- Assess Vulnerabilities
- Implement Penetration Testing

### 5 - IMPLEMENTING HOST AND SOFTWARE SECURITY

- Implement Host Security
- Implement Cloud and Virtualization Security
- Implement Mobile Device Security
- Incorporate Security in the Software Development Lifecycle

### 6 - IMPLEMENTING NETWORK SECURITY

- Configure Network Security Technologies
- Secure Network Design Elements

- Implement Secure Networking Protocols and Services
- Secure Wireless Traffic

### 7 - MANAGING IDENTITY AND ACCESS

- Implement Identity and Access Management
- Configure Directory Services
- Configure Access Services
- Manage Accounts

### 8 - IMPLEMENTING CRYPTOGRAPHY

- Identify Advanced Cryptography Concepts
- Select Cryptographic Algorithms
- Configure a Public Key Infrastructure
- Enroll Certificates
- Back Up and Restore Certificates and Private Keys
- Revoke Certificates

### 9 - IMPLEMENTING OPERATIONAL SECURITY

- Evaluate Security Frameworks and Guidelines
- Incorporate Documentation in Operational Security
- Implement Security Strategies
- Manage Data Security Processes
- Implement Physical Controls

### 10 - ADDRESSING SECURITY INCIDENTS

- Troubleshoot Common Security Issues
- Respond to Security Incidents
- Investigate Security Incidents

### 11 - ENSURING BUSINESS CONTINUITY

- Select Business Continuity and Disaster Recovery Processes
- Develop a Business Continuity Plan