



Official CompTIA learning resources
for Instructor-Led Training:

CompTIA Security+

Official CompTIA learning resources for Instructor-Led Training are designed with the instructor in mind, providing insights and tools for successfully training learners pursuing their CompTIA Security+ certification.

OVERVIEW

The Official CompTIA Security+ Instructor and Student Guides (SY0-601) have been developed by CompTIA for the CompTIA certification candidate. Rigorously evaluated to validate coverage of the CompTIA Security+ (SY0-601) exam objectives, The Official CompTIA Security+ Instructor and Student Guides teach students the knowledge and skills required to assess the security posture of an enterprise environment and recommend and implement appropriate security solutions; monitor and secure hybrid environments, including cloud, mobile, and IoT; operate with an awareness of applicable laws and policies, including principles of governance, risk, and compliance; identify, analyze, and respond to security events and incidents.

OFFICIAL LEARNING RESOURCES

- The Official CompTIA Security+ Instructor Guide (Exam SY0-601) Print & eBook
- The Official CompTIA Security+ Student Guide (Exam SY0-601) Print & eBook
- CompTIA CertMaster Labs for Security+ (Exam SY0-601) Individual License & Student Access Key
- CompTIA CertMaster Learn for Security+ (Exam SY0-601) Individual License & Student Access Key
- CompTIA CertMaster Practice for Security+ (SY0-601)

NEW FEATURES

- **Content Updates for the CompTIA Security+ SY0-601 Exam:** The content has been updated and revised to cover the CompTIA Security+ SY0-601 exam objectives. The courseware has been divided into a larger number of lessons and topics than the previous version of the course with the aim of restricting the size of each topic to no more than ten subject headings. This greater number of lessons does not represent a major increase in the overall course length, however. While there is a substantial number of additional content examples to cover, every effort has been made to constrain the overall length by condensing text under subject headings.
- **Easily Implemented in Classroom Environments:** The content and resources in the Security+ SY0-601 course have been reworked to make them more flexible to suit a variety of classroom formats, whether there are 5 days or 12 weeks to teach the material.
- **Lengthy on-premise Lab Activities that require organizations to setup and maintain equipment have been removed from the Learning Plan:** Instead, graded labs (CertMaster Labs) are available hosted on the Skillable. These modular labs require only a modern browser and internet connection, saving organizations hours of setup time. Their short durations of 10-30 minutes allow for labs to be more easily integrated in coursework. As a result, instructors will no longer see the setup guide in the Instructor Resources.
- **Reworked Presentation Tools:** The number of PowerPoint lecture slides has been vastly reduced as compared with SY0-501, while supporting PPT notes and Presentation Planners have been enhanced, making it easier for instructors to plan lectures and use classroom time effectively.
- **Engaging Video Program:** New videos developed exclusively for CompTIA provide short, engaging demonstrations of key activities in the course. The videos provide an alternative to hands-on demonstrations.
- **More Assessment:** The number of practice questions in CertMaster Learn has nearly doubled, helping learners more accurately determine their readiness for taking the CompTIA Security+ exam. Likewise, additional performance-based questions have been added to the final assessment in CertMaster Learn, making this resource a better preparation tool for the experience of taking a CompTIA exam requiring that learners understand the content, but also utilize time management skills to complete the assessment within the allotted time.
- **Integrated with CertMaster Labs:** When purchased together in a bundle, CertMaster Labs are integrated as Study Tasks within the CertMaster Learn Learning Plan. As a result, learners experience both knowledge acquisition and hands-on skills attainment through a single login and seamless workflow. Additionally, organizations who purchase the integrated course will be able to review student and group lab scores in the CertMaster Learn Boost Dashboard and hold students accountable for lab work.

KEY FEATURES AND BENEFITS

- **Designed for Instructors by Instructors:** More than 50 instructors were involved in the development of Security+ Official Content providing feedback through focus groups, reviews, and surveys. The result is a suite of resources that works together seamlessly to address the challenges faced by instructors and students in these courses.
- **Rigorously Evaluated to Ensure Adequate Coverage of Exam Objectives:** CompTIA employs trusted third-party subject matter experts to review the content against the exam objectives and validate that an appropriate breadth and depth of coverage has been achieved. This process helps ensure that students using The Official CompTIA Security+ Guides are adequately prepared for the CompTIA Security+ certification exam.
- **Flexible and Customizable Based on Course Format:** Class resources can be easily configured based on modality.

CERTMASTER LABS

CompTIA CertMaster Labs for Security+ (SY0-601) enable hands-on practice and skills development using real equipment and software accessed through a remote, browser-based lab environment. Aligned with Official CompTIA courseware and the CompTIA Security+ (SY0-601) exam objectives, CertMaster Labs make it easy for learners to practice and apply their skills in real workplace scenarios in preparation for the certification exam. All lab activities include gradable assessments, offer feedback and hints, and provide a score based on learner inputs, ultimately guiding learners to the most correct and efficient path through job tasks and, in a classroom environment, providing instructors with meaningful insight into student performance. When used in combination with CertMaster Learn instructors have the ability to view graded labs through the boost dashboard.

ENHANCED LEARNING RESOURCES

The Official CompTIA Security+ Guides include the accompanying resources:

Comprehensive INSTRUCTOR resources ensure successful course delivery by providing:	Comprehensive STUDENT resources engage students by providing:
<ul style="list-style-type: none">• Course-specific delivery tips provide the instructor with additional insights to deliver the course successfully• Facilitator notes in instructor guide• Solutions to activities and discussions• PowerPoint slides: A complete set of slides to facilitate the class including lists, tables, diagrams, illustrations, annotated screens and activity summaries• Presentation Planners help plan and schedule courses based on different course lengths• Solutions: Instructors have solutions to Activities and Discussion Questions embedded within the Instructor Guide.• Transition Guides Documents designed to help users transition from SY0-501 to SY0-601 version of the content.	<ul style="list-style-type: none">• eBook: An interactive online version of the book, along with secure PDF and downloadable versions• Files: Any course files available to download• Videos: Brief videos, developed exclusively for CompTIA, provide demonstrations of key activities in the course• Assessment: A series of different assessments for each lesson as well an overall self-assessment• PowerPoint slides• Solutions to activities and discussions• Strengths and Weaknesses Dashboard: Students assessments results are aggregated in the Strengths and Weaknesses dashboard to provide an indicator of their overall performance in the course.

ACCESSIBILITY

CompTIA strives to meet WCAG 2.0 AA compliance for CertMaster Learn. This includes the following accessibility features: keyboard navigation, alt-tags for images, captions for videos, screen reader compatibility, and adherence to color contrast guidelines.

COURSE OVERVIEW

This course is for students who are preparing to take the CompTIA Security+ certification exam SY0-601.

This course is aimed towards IT professionals who install and configure systems to secure applications, networks, and devices; perform threat analysis and respond with appropriate mitigation techniques; participate in risk mitigation activities; and operate with an awareness of applicable policies, laws, and regulations.

COURSE OUTLINE

To view the course outline for Security+ (SY0-601) visit:

<https://s.comptia.org/37hU560>

JOB ROLES

- Security Administrator
- Systems Administrator
- Helpdesk Manager / Analyst
- Security Analyst
- Network / Cloud Engineer
- IT Auditors
- Security Engineer
- IT Project Manager
- Security Officer
- Information Security Manager



PREREQUISITES

Students should have basic Windows user skills and a fundamental understanding of computer and networking concepts. Achievement of CompTIA A+ and Network+ certifications, plus two years of experience with IT administration with a security focus.

TABLE OF CONTENTS

<p>Lesson 1: Comparing Security Roles and Security Controls Topic 1A: Compare and Contrast Information Security Roles Topic 1B: Compare and Contrast Security Control and Framework Types Topic 1C: Compare and Contrast Social Engineering Attack Types Topic 1D: Determine Malware Types</p>	<p>Lesson 2: Explaining Threat Actors and Threat Intelligence Topic 2A: Explain Threat Actor Types and Attack Vectors Topic 2B: Explain Threat Intelligence Sources</p>	<p>Lesson 3: Performing Security Assessments Topic 3A: Assess Organizational Security with Network Reconnaissance Tools Topic 3B: Explain Security Concerns with General Vulnerability Types Topic 3C: Summarize Vulnerability Scanning Techniques Topic 3D: Explain Penetration Testing Concepts</p>
<p>Lesson 4: Identifying Social Engineering and Malware Topic 4A: Compare and Contrast Social Engineering Techniques Topic 4B: Analyze Indicators of Malware-Based Attacks</p>	<p>Lesson 5: Summarizing Basic Cryptographic Concepts Topic 5A: Compare and Contrast Cryptographic Ciphers Topic 5B: Summarize Cryptographic Modes of Operation Topic 5C: Summarize Cryptographic Use Cases and Weaknesses Topic 5D: Summarize Other Cryptographic Technologies</p>	<p>Lesson 6: Implementing Public Key Infrastructure Topic 6A: Implement Certificates and Certificate Authorities Topic 6B: Implement PKI Management</p>
<p>Lesson 7: Implementing Authentication Controls Topic 7A: Summarize Authentication Design Concepts Topic 7B: Implement Knowledge-Based Authentication Topic 7C: Implement Authentication Technologies Topic 7D: Summarize Biometrics Authentication Concepts</p>	<p>Lesson 8: Implementing Identity and Account Management Controls Topic 8A: Implement Identity and Account Types Topic 8B: Implement Account Policies Topic 8C: Implement Authorization Solutions Topic 8D: Explain the Importance of Personnel Policies</p>	<p>Lesson 9: Implementing Secure Network Designs Topic 9A: Implement Secure Network Designs Topic 9B: Implement Secure Switching and Routing Topic 9C: Implement Secure Wireless Infrastructure Topic 9D: Implement Load Balancer</p>
<p>Lesson 10: Implementing Network Security Appliances Topic 10A: Implement Firewalls and Proxy Servers Topic 10B: Implement Network Security Monitoring Topic 10C: Summarize the Use of SIEM</p>	<p>Lesson 11: Implementing Secure Network Protocols Topic 11A: Implement Secure Network Operations Protocols Topic 11B: Implement Secure Application Protocols Topic 11C: Implement Secure Remote Access Protocols</p>	<p>Lesson 12: Implementing Host Security Solutions Topic 12A: Implement Secure Firmware Topic 12B: Implement Endpoint Security</p>
<p>Lesson 13: Implementing Secure Mobile Solutions Topic 13A: Implement Mobile Device Management Topic 13B: Implement Secure Mobile Device Connections</p>	<p>Lesson 14: Summarizing Secure Application Concepts Topic 14A: Analyze Indicators of Application Attacks Topic 14B: Analyze Indicators of Web Application Attacks Topic 14C: Summarize Secure Coding Practices Topic 14D: Implement Secure Script Environments Topic 14E: Summarize Deployment and Automation Concepts</p>	<p>Lesson 15: Implementing Secure Cloud Solutions Topic 15A: Summarize Secure Cloud and Virtualization Services Topic 15B: Apply Cloud Security Solutions Topic 15C: Summarize Infrastructure as Code Concepts</p>
<p>Lesson 16: Explaining Data Privacy and Protection Concepts Topic 16A: Explain Privacy and Data Sensitivity Concepts Topic 16B: Explain Privacy and Data Protection Controls</p>	<p>Lesson 17: Performing Incident Response Topic 17A: Summarize Incident Response Procedures Topic 17B: Utilize Appropriate Data Sources for Incident Response Topic 17C: Apply Mitigation Controls</p>	<p>Lesson 18: Explaining Digital Forensics Topic 18A: Explain Key Aspects of Digital Forensics Documentation Topic 18B: Explain Key Aspects of Digital Forensics Evidence Acquisition</p>
<p>Lesson 19: Summarizing Risk Management Concepts Topic 19A: Explain Risk Management Processes and Concepts Topic 19B: Explain Business Impact Analysis Concepts</p>	<p>Lesson 20: Implementing Cybersecurity Resilience Topic 20A: Implement Redundancy Strategies Topic 20B: Implement Backup Strategies Topic 20C: Implement Cybersecurity Resiliency Strategies</p>	<p>Lesson 21: Explaining Physical Security Topic 21A: Explain the Importance of Physical Site Security Controls Topic 21B: Explain the Importance of Physical Host Security Controls</p>

PURCHASE EVERYTHING IN ONE PLACE

Official CompTIA learning resources are available on the CompTIA Store at <https://store.comptia.org/>, which means partners will be able to obtain Official CompTIA learning resources, CompTIA CertMaster products and exam vouchers all in one place. Please contact your CompTIA business development representative for more information.

