

Official CompTIA learning resources
for Instructor-Led Training:

CompTIA CySA+

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 CySA+ certification.

OVERVIEW

The Official CompTIA CySA+ Guide (Exam CSO-001) is developed for cybersecurity practitioners who perform job functions related to protecting information systems by ensuring their availability, integrity, authentication, confidentiality, and non-repudiation. These materials focus on the knowledge, ability, and skills necessary to provide for the defense of those information systems in a cybersecurity context, including protection, detection, analysis, investigation, and response processes. It provides full coverage of the objectives for the CompTIA CySA+ certification and will help prepare students to take the exam.

OFFICIAL LEARNING RESOURCES

- The Official CompTIA CySA+ Instructor Guide (Exam CSO-001)
- The Official CompTIA CySA+ Student Guide (Exam CSO-001)
- CompTIA Learning Center – Digital Learning Platform – included with purchase of print and eBook
- CompTIA CySA+ (Exam CSO-001) CompTIA Labs
- CompTIA CertMaster Practice for CySA+ (Exam CSO-001)

WHY ARE OFFICIAL COMPTIA LEARNING RESOURCES DIFFERENT?

- **For Exam Takers by the Exam Developer** - Official CompTIA learning resources are the only study material exclusively developed by CompTIA for the CompTIA certification candidate.
- **Developed with the instructor in mind** - Official CompTIA learning resource's focus on instruction are unique, providing instructors ease and flexibility to teach to any audience within any modality.
- **Complete Library** - No other content library covers all exam objectives for all certifications. It provides complete breadth, depth and currency of material unavailable with competitors.

KEY FEATURES AND BENEFITS

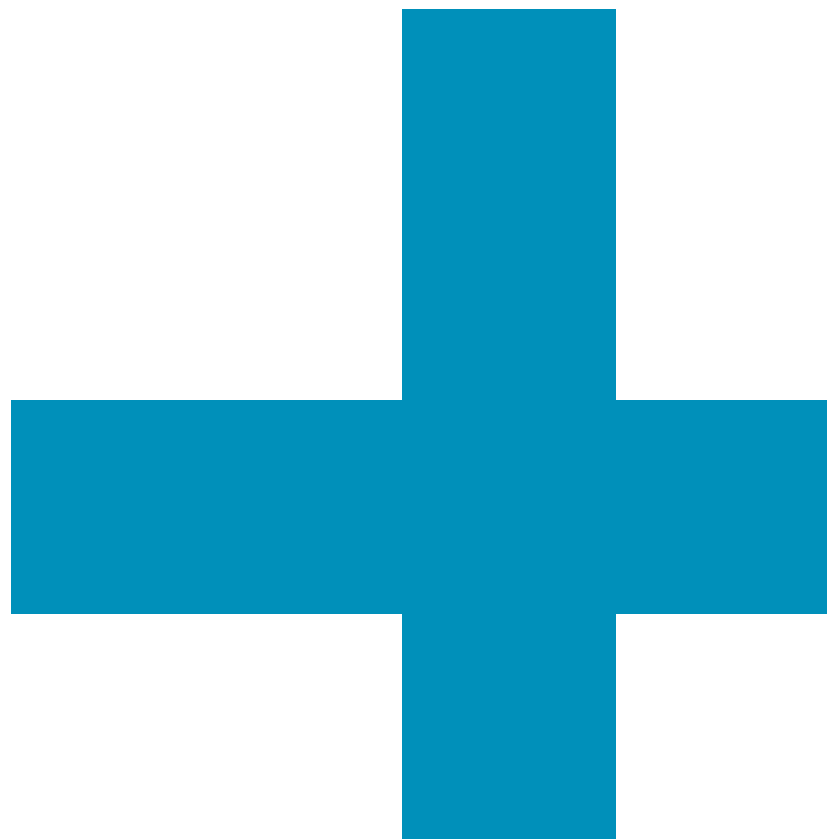
- **Designed and Class-tested for Instructor-Led Training** using proven instructional design. Topics are presented in a hierarchy that offers knowledge, procedural tasks and hand-on activities that require students put knowledge into practice. This approach keeps student engaged and ensures success.
- **Focused on job roles and 100% coverage of exam objectives** means learning resources are practical, based on real performance scenarios. In addition, learning resources are aligned to certification exam objectives.
- **Active Learning** is integrated with one activity per topic designed to enable students to practice guidelines and procedures as well as solidify understanding of the informational material presented in the course.
- **Flexible and customizable based on course format** whether the course is co-located or remote, synchronous or asynchronous. Class resources can be easily configured based on modality.

LABS

CompTIA Labs, hosted by Learn on Demand Systems, allow students to learn in actual software applications through a remote lab environment. Labs allow students to practice what they are learning using real, hands-on experiences. Students have access to the software environment for 180 days after a CompTIA Labs access key is redeemed, providing a post-class resource for students to practice their skills.

EXAM PREP OPTION

CertMaster Practice is an online assessment and remediation tool designed to help students feel more confident and prepared for their CompTIA exam.



ENHANCED LEARNING RESOURCES

The Official CompTIA CySA+ 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.	<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 by ITProTV, 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.

COURSE OVERVIEW

This course is for students who are preparing for the CompTIA CySA+ certification exam CS0-001.

This course has been created for cybersecurity practitioners who perform job functions related to protecting information systems by ensuring their availability, integrity, authentication, confidentiality, and non-repudiation. This course focuses on the knowledge, ability, and skills necessary to provide for the defense of those information systems in a cybersecurity context, including protection, detection, analysis, investigation, and response processes. In addition, the course ensures that all members of an IT team—everyone from help desk staff to the Chief Information Officer—understand their role in these security processes.

JOB ROLES

- IT Security Analyst
- Vulnerability Analyst
- Threat Intelligence Analyst
- Cybersecurity Analyst
- Security Operations Center (SOC) Analyst
- Cybersecurity Specialist
- Cybersecurity Analyst
- Security Engineer



PREREQUISITES

Students should have at least two years' experience in IT network security plus:

- The ability to recognize information security vulnerabilities and threats in the context of risk management.
- Foundation-level operational skills with common operating systems
- Foundational knowledge of the concepts and framework of common desktop and network security safeguards
- Foundation-level understanding of some of common networking concepts
- Foundational knowledge of major TCP/IP networking protocols

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Lesson 1: Assessing Information Security Risk Topic A: Identify the Importance of Risk Management Topic B: Assess Risk Topic C: Mitigate Risk Topic D: Integrate Documentation into Risk Management	Lesson 2: Analyzing Reconnaissance Threats to Computing and Network Environments Topic A: Assess the Impact of Reconnaissance Incidents Topic B: Assess the Impact of Social Engineering	Lesson 3: Analyzing Attacks on Computing and Networking Environments Topic A: Assess the Impact of System Hacking Attacks Topic B: Assess the Impact of Web-Based Attacks Topic C: Assess the Impact of Malware Topic D: Assess the Impact of Hijacking and Impersonation Attacks Topic E: Assess the Impact of DoS Incidents Topic F: Assess the Impact of Threats to Mobile Security Topic G: Assess the Impact of Threats to Cloud Security
Lesson 4: Analyzing Post-Attack Techniques Topic A: Assess Command and Control Techniques Topic B: Assess Persistence Techniques Topic C: Assess Lateral Movement and Pivoting Techniques Topic D: Assess Data Exfiltration Techniques Topic E: Assess Anti-Forensics Techniques	Lesson 5: Managing Vulnerabilities in the Organization Topic A: Implement a Vulnerability Management Plan Topic B: Assess Common Vulnerabilities Topic C: Conduct Vulnerability Scans Topic D: Conduct Penetration Tests on Network Assets	Lesson 6: Collecting Cybersecurity Intelligence Topic A: Deploy a Security Intelligence Collection and Analysis Platform Topic B: Collect Data from Network-Based Intelligence Sources Topic C: Collect Data from Host-Based Intelligence Sources
Lesson 7: Analyzing Log Data Topic A: Use Common Tools to Analyze Logs Topic B: Use SIEM Tools for Analysis	Lesson 8: Performing Active Asset and Network Analysis Topic A: Analyze Incidents with Windows-Based Tools Topic B: Analyze Incidents with Linux-Based Tools Topic C: Analyze Malware Topic D: Analyze Indicators of Compromise	Lesson 9: Responding to Cybersecurity Incidents Topic A: Deploy an Incident Handling and Response Architecture Topic B: Mitigate Incidents Topic C: Prepare for Forensic Investigation as a CSIRT
Lesson 10: Investigating Cybersecurity Incidents Topic A: Apply a Forensic Investigation Plan Topic B: Securely Collect and Analyze Electronic Evidence Topic C: Follow Up on the Results of an Investigation	Lesson 11: Addressing Security Architecture Issues Topic A: Remediate Identity and Access Management	

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.