COMPTIA SECURITYX CERTIFICATION PREP COURSE

Course Code: 2951

Learn advanced security administration tools and techniques while preparing for the CompTIA SecurityX exam (CAS-005) in this hands-on course.

The CompTIA SecurityX (CAS-005) Certification Prep Course is designed for experienced cybersecurity professionals ready to take their expertise to the next level. As the newly rebranded successor to CASP+, SecurityX is part of CompTIA's Xpert series and focuses on the skills required of senior security engineers and architects who lead enterprise-level cybersecurity initiatives. This course equips learners with the advanced knowledge needed to design and implement secure solutions across complex environments, preparing them to meet today's evolving threat landscape head-on.

Throughout the course, students will engage with real-world scenarios and hands-on labs that mirror the challenges faced by professionals in high-stakes cybersecurity roles. Topics include digital security architecture, enterprise risk management, governance, and advanced threat mitigation strategies. Whether you're aiming to validate your skills or step into a leadership role in cybersecurity, this course offers the depth and rigor needed to succeed on the SecurityX (CAS-005) exam and beyond.

This class includes the CompTIA SecurityX exam voucher

What You'll Learn

- Design, implement, and integrate secure solutions across complex environments to support a resilient enterprise in security architecture and engineering.
- Use automation, monitoring, detection, and incident response to proactively support ongoing security operations.
- Apply security practices to cloud, on-premises, and hybrid environments to ensure enterprise-wide protection.
- Utilize cryptographic technologies and techniques while evaluating the impact of emerging trends, such as artificial intelligence, on information security.
- Implement governance, compliance, risk management, and threat modeling strategies across the enterprise.

- Validate advanced, hands-on skills in security architecture and senior security engineering within live environments.

Who Needs to Attend

This course is designed for IT professionals in the cybersecurity industry whose primary job responsibility is to secure complex enterprise environments. The target student should have real-world experience with the technical administration of these enterprise environments.

This course is also designed for students who are seeking the CompTIA® SecurityX certification and who want to prepare for Exam CAS-005. Students seeking SecurityX certification should have at least 10 years of experience in IT management, with at least 5 years of hands-on technical security experience

Prerequisites

To be fit for this advanced course, you should have at least a foundational knowledge of information security. This includes, but is not limited to:

- Knowledge of identity and access management (IAM) concepts and common implementations, such as authentication factors and directory services.
- Knowledge of cryptographic concepts and common implementations, such as Secure Sockets Layer/Transport Layer Security (SSL/TLS) and public key infrastructure (PKI).
- Knowledge of computer networking concepts and implementations, such as the TCP/IP model and configuration of routers and switches.
- Knowledge of common security technologies used to safeguard the enterprise, such as anti-malware solutions, firewalls, and VPNs

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CLASSROOM LIVE	$3,295 USD	5 Day

Classroom Live Outline

Module 1: Introduction

- Preassessment

Module 2: Summarizing Governance Risk and Compliance

- Implement Appropriate Governance Components
- Explain Legal Compliance
- Apply Risk Management Strategies

Module 3: Implementing Architecture and Design

- Apply Software Development
- Integrate Software Architecture
- Support Operational Resilience
- Implement Cloud Infrastructure
- Integrate Zero Trust Concepts
- Troubleshoot using AAA and IAM

Module 4: Understanding Security Engineering

- Enhance Endpoint Security
- Configure Network Infrastructure
- Initiate Security Automation
- Apply Cryptography Concepts

Module 5: Applying Security Operations and Incident Response

- Perform Threat Modeling
- Examine Security Monitoring
- Analyze Known Attack Methods and Associated Mitigations
- Apply Threat Hunting Tools and Technologies
- Evaluate Incident Analysis and Response

Classroom Live Labs

- Assisted Lab: Exploring the Lab Environment
- Assisted Lab: Using Automation to Identify Sensitive Data
- Assisted Lab: Understanding DR Capabilities in the Cloud
- Assisted Lab: Implementing a Web Application Firewall
- Assisted Lab: Understanding the Role of SPF Records and DNSSEC
- Assisted Lab: Using Security Incident and Event Management Features
- Assisted Lab: Performing Static Code Analysis
- Assisted Lab: Exploiting Web Applications – Stored XSS, SQL Injection
- APPLIED LAB: Analyzing Web Application Vulnerabilities
- Assisted Lab: Implementing a VNet in Azure
- Assisted Lab: Deploying a Virtual Private Cloud in Amazon Web Services
- Assisted Lab: Implementing and Updating Containers on Windows Server 2019
- APPLIED LAB: Performing Container Update Tasks
- Assisted Lab: Understanding DNS over HTTPS (DoH)
- Assisted Lab: Deploying a Hardened Server Image in the Cloud
- Assisted Lab: Implementing an Application Blocklist Policy
- Assisted Lab: Configuring Monitoring in the Cloud
- Assisted Lab: Implementing Data Protection using Symmetric Encryption
- Assisted Lab: Exploring Cryptography and Cryptanalysis using Visual Tools
- Assisted Lab: Implementing HTTP Server Certificates
- APPLIED LAB: Troubleshooting HTTP Server Certificates
- Assisted Lab: Exploring MITRE ATT&CK Navigator
- Assisted Lab: Exploring and Interpreting Intrusion Detection System Alerts
- APPLIED LAB: Analyzing Intrusion Detection System Logs
- Assisted Lab: Exploiting the Server Message Block Protocol
- Assisted Lab: Analyzing SMB Vulnerabilities
- Assisted Lab: Analyzing Firmware using Binary Analysis and Hardware Emulation
- Assisted Lab: Analyzing and Attack Wireless Network Protections

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VIRTUAL CLASSROOM LIVE	$3,295 USD	5 Day

Virtual Classroom Live Outline

Module 1: Introduction

- Preassessment

Module 2: Summarizing Governance Risk and Compliance

- Implement Appropriate Governance Components
- Explain Legal Compliance
- Apply Risk Management Strategies

Module 3: Implementing Architecture and Design

- Apply Software Development
- Integrate Software Architecture
- Support Operational Resilience
- Implement Cloud Infrastructure
- Integrate Zero Trust Concepts
- Troubleshoot using AAA and IAM

Module 4: Understanding Security Engineering

- Enhance Endpoint Security
- Configure Network Infrastructure
- Initiate Security Automation
- Apply Cryptography Concepts

Module 5: Applying Security Operations and Incident Response

- Perform Threat Modeling
- Examine Security Monitoring
- Analyze Known Attack Methods and Associated Mitigations
- Apply Threat Hunting Tools and Technologies
- Evaluate Incident Analysis and Response

Virtual Classroom Live Labs

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Sep 22 - 26, 2025 | 8:30 AM - 4:30 PM EDT

Oct 6 - 10, 2025 | 8:30 AM - 4:30 PM EDT

Nov 3 - 7, 2025 | 8:30 AM - 4:30 PM EST

Dec 8 - 12, 2025 | 8:30 AM - 4:30 PM EST

Jan 5 - 9, 2026 | 8:30 AM - 4:30 PM EST

Jan 26 - 30, 2026 | 11:30 AM - 7:30 PM EST

Feb 9 - 13, 2026 | 8:30 AM - 4:30 PM EST

Mar 23 - 27, 2026 | 8:30 AM - 4:30 PM EDT

Apr 27 - May 1, 2026 | 8:30 AM - 4:30 PM EDT

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PRIVATE GROUP TRAINING	5 Day

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.