

CyberSecurity Specialist Syllabus CompTIA Security+ v601

Course Description

CyberSecurity Specialist: In this course, students will learn how to secure and manage all facets of a network, from CPU cycles to software used by individuals or across a network. Students will learn how to implement and maintain an effective security strategy within a company's network infrastructure.

The class will begin at 8:00 A.M. EST each instructional day on Saturdays and conclude at 6:00 P.M. EST each session. The course consists of a total of 40 hours.

Saturday 1

<u>Morning Session: Introduction to Information Security / Comparing and Contrasting Security Attacks / PKI Infrastructure</u>

- Topics
 - Identifying Information Security Roles land Frameworks
 - Recognizing Types of Attacks and Attackers
 - o Implementing a Public Key Infrastructure
- Activities and Demonstrations
 - Identifying Different Cyber Attacks (Skillsoft Lab)
 - Control Mechanisms, Standards, and Frameworks (Skillsoft Demo Lab)
 - Social Engineering Techniques and Exploits (Skillsoft Demo Lab)
- End of Class Review

<u>Afternoon Session: Security Concepts and Applications / Mobile Security / Risk Management and Disaster</u> <u>Recovery</u>

- Topics
 - Explaining Organizational Security Concepts
 - Understanding Security Policies and Risk and Disaster Recovery Importance
 - Implementing Data Security Policies
 - Identifying Secure Application Development Concepts
- Activities and Demonstrations
 - Implementing Security Protocols and Application Security Solutions (Skillsoft Lab)
 - Mobile Security Solutions (Skillsoft Demo Lab)
 - Organizational Risk Management and Policies (Skillsoft Demo Lab)
 - Incident Response Tools (Skillsoft Demo Lab)



End of Class Review

Saturday 2

Morning Session: Security Software Tools / Secure Network Protocols

- Topics
 - Assessing Security Posture with Software Tools
 - Implementing Secure Network Access Protocols
- Activities and Demonstrations
 - Securing a Cloud Infrastructure (Skillsoft Demo Lab)
 - Implementation of Secure Protocols (Skillsoft Lab)
- End of Class Review

<u>Afternoon Session: Cryptography / Security Controls / Secure Network Implementation</u>

- Topics
 - Explaining Basic Cryptography Concepts
 - Comparing and Contrasting Security Controls
 - Implementing Secure Network Applications and Architecture
- Activities and Demonstrations
 - Cryptographic Basic Concepts (Skillsoft Lab)
 - Implementing Secure Network Solutions (Skillsoft Demo Lab)
- End of Class Review

Saturday 3

Morning Session: Security Appliances

- Topic
 - Installing and Configuring Security Appliances
- Activities and Demonstrations
 - Authentication and Authorization Implementation Techniques (Skillsoft Lab)
 - Identifying Different Application Exploits (Skillsoft Demo Lab)
 - Data Protection Implementation (Skillsoft Demo Lab)
- End of Class Review

Afternoon Session: Access Management Controls / Access Services & Accounts / PKI Infrastructure

- Topics
 - Implementing Access Management Controls
 - Managing Access Services and Accounts
- Activities and Demonstrations



- o Identity and Account Management Mechanisms (Skillsoft Lab)
- Implementing a Public Key Infrastructure (Skillsoft Demo Lab)
- End of Class Review

Saturday 4

Morning Session: Understanding Monitoring and Auditing / Application Attacks and Security

- Topic
 - Installing and Configuring Wireless and Physical Access Security
- Activities and Demonstrations
 - Implementing Wireless Security Configurations (Skillsoft Demo Lab)
 - Application Hardening Deployment Techniques (Skillsoft Demo Lab)
 - Physical Security Control Mechanisms (Skillsoft Lab)
- End of Class Review

Afternoon Session: Full Course Review

- Topic
 - Full Course Review
 - Student-focused Q&A for Understanding