

CompTIA Security+ Syllabus

Lesson 1: Comparing Security Roles and Controls **2 Hours - 2 Topics**

- **Topic 1A: Compare and Contrast Information Security Roles (Day 1)**
- **Topic 1B: Compare and Contrast Security Control and Framework Types (Day 1)**

Lesson 2: Explaining Threat Actors and Threat Intelligence **2 Hours - 2 Topics**

- **Topic 2A: Explain Threat Actor Types and Attack Vectors (Day 2)**
- **Topic 2B: Explain Threat Intelligence Sources (Day 2)**

Lesson 3: Performing Security Assessments **2 Hours - 4 Topics**

- **Topic 3A: Assess Organizational Security with Network Reconnaissance Tools (Day 3)**
- **Topic 3B: Explain Security Concerns with General Vulnerability Types (Day 3)**
- **Topic 3C: Summarize Vulnerability Scanning Techniques (Day 3)**
- **Topic 3D: Explain Penetration Testing Concepts (Day 3)**

Lesson 4: Identifying Social Engineering and Malware **2 Hours - 2 Topics**

- **Topic 4A: Compare and Contrast Social Engineering Techniques (Day 4)**
- **Topic 4B: Analyze Indicators of Malware-Based Attacks (Day 4)**

Lesson 5: Summarizing Basic Cryptographic Concepts **2 Hours - 4 Topics**

- **Topic 5A: Compare and Contrast Cryptographic Ciphers (Day 5)**
- **Topic 5B: Summarize Cryptographic Modes of Operation (Day 5)**
- **Topic 5C: Summarize Cryptographic Use Cases and Weaknesses (Day 5)**
- **Topic 5D: Summarize Other Cryptographic Technologies (Day 5)**

Lesson 6: Implementing Public Key Infrastructure **2 Hours - 2 Topics**

- **Topic 6A: Implement Certificates and Certificate Authorities (Day 6)**
- **Topic 6B: Implement PKI Management (Day 6)**

Lesson 7: Implementing Authentication Controls **2 Hours - 4 Topics**

- **Topic 7A: Summarize Authentication Design Concepts (Day 7)**
- **Topic 7B: Implement Knowledge-Based Authentication (Day 7)**
- **Topic 7C: Implement Authentication Technologies (Day 7)**
- **Topic 7D: Summarize Biometrics Authentication Concepts (Day 7)**

Lesson 8: Implementing Identity and Account Management Controls **2 Hours - 4 Topics**

- **Topic 8A: Implement Identity and Account Types (Day 8)**
- **Topic 8B: Implement Account Policies (Day 8)**
- **Topic 8C: Implement Authorization Solutions (Day 8)**
- **Topic 8D: Explain the Importance of Personnel Policies (Day 8)**

Lesson 9: Implementing Secure Network Designs **2 Hours - 4 Topics**

- **Topic 9A: Implement Secure Network Designs (Day 9)**
- **Topic 9B: Implement Secure Switching and Routing (Day 9)**
- **Topic 9C: Implement Secure Wireless Infrastructure (Day 9)**
- **Topic 9D: Implement Load Balancers (Day 9)**

Lesson 10: Implementing Network Security Appliances **2 Hours - 3 Topics**

- **Topic 10A: Implement Firewalls and Proxy Servers (Day 10)**
- **Topic 10B: Implement Network Security Monitoring (Day 10)**
- **Topic 10C: Summarize the Use of SIEM (Day 10)**

Lesson 11: Implementing Secure Network Protocols **2 Hours - 3 Topics**

- **Topic 11A: Implement Secure Network Operations Protocols (Day 11)**
- **Topic 11B: Implement Secure Application Protocols (Day 11)**
- **Topic 11C: Implement Secure Remote Access Protocols (Day 11)**

Lesson 12: Implementing Host Security Solutions **2 Hours - 3 Topics**

- **Topic 12A: Implement Secure Firmware (Day 12)**
- **Topic 12B: Implement Endpoint Security (Day 12)**
- **Topic 12C: Explain Embedded System Security Implications (Day 12)**

Lesson 13: Implementing Secure Mobile Solutions **2 Hours - 2 Topics**

- **Topic 13A: Implement Mobile Device Management (Day 13)**
- **Topic 13B: Implement Secure Mobile Device Connections (Day 13)**

Lesson 14: Summarizing Secure Application Concepts **2 Hours - 5 Topics**

- **Topic 14A: Analyze Indicators of Application Attacks (Day 14)**
- **Topic 14B: Analyze Indicators of Web Application Attacks (Day 14)**
- **Topic 14C: Summarize Secure Coding Practices (Day 14)**
- **Topic 14D: Implement Secure Script Environments (Day 14)**
- **Topic 14E: Summarize Deployment and Automation Concepts (Day 14)**

Lesson 15: Implementing Secure Cloud Solutions **2 Hours - 3 Topics**

- **Topic 15A: Summarize Secure Cloud and Virtualization Services (Day 15)**
- **Topic 15B: Apply Cloud Security Solutions (Day 15)**
- **Topic 15C: Summarize Infrastructure as Code Concepts (Day 15)**

Lesson 16: Explaining Data Privacy and Protection Concepts **2 Hours - 2 Topics**

- **Topic 16A: Explain Privacy and Data Sensitivity Concepts (Day 16)**
- **Topic 16B: Explain Privacy and Data Protection Controls (Day 16)**

Lesson 17: Performing Incident Response **2 Hours - 3 Topics**

- **Topic 17A: Summarize Incident Response Procedures (Day 17)**
- **Topic 17B: Utilize Appropriate Data Sources for Incident Response (Day 17)**
- **Topic 17C: Apply Mitigation Controls (Day 17)**

Lesson 18: Explaining Digital Forensics **2 Hours - 2 Topics**

- **Topic 18A: Explain Key Aspects of Digital Forensics Documentation Acquisition (Day 18)**
- **Topic 18B: Explain Key Aspects of Digital Forensics Evidence Acquisition (Day 18)**

Lesson 19: Summarizing Risk Management Concepts **2 Hours - 2 Topics**

- **Topic 19A: Explain Risk Management Processes and Concepts (Day 19)**
- **Topic 19B: Explain Business Impact Analysis Concepts (Day 19)**

Lesson 20: Implementing Cybersecurity Resilience **2 Hours - 3 Topics**

- **Topic 20A: Implement Redundancy Strategies (Day 20)**
- **Topic 20B: Implement Backup Strategies (Day 20)**
- **Topic 20C: Implement Cybersecurity Resiliency Strategies (Day 20)**

Lesson 21: Explaining Physical Security **2 Hours - 2 Topics**

- **Topic 21B: Explain the Importance of Physical Host (Day 21)**
- **Security Controls (Day 21)**