

CompTIA Security+ (SYO – 601)



Days: 5

Prerequisites: This course assumes basic knowledge of using and maintaining individual workstations. Knowledge equivalent to the CompTIA A+ certification is helpful but not necessary.

Audience: CompTIA Security+ is the first security certification a candidate should earn. It establishes the core knowledge required of any cybersecurity role and provides a springboard to intermediate-level cybersecurity jobs.

Description: CompTIA Security+ Certification SY0-601 provides the basic knowledge needed to plan, implement, and maintain information security in a vendor-neutral format. This includes risk management, host and network security, authentication and access control systems, cryptography, and organizational security. This course maps to the CompTIA Security+ certification exam. Objective coverage is marked throughout the course.

Students will benefit most from this course if they intend to take a CompTIA Security+ SY0-601 exam.

OUTLINE:

CHAPTER 1: SECURITY FUNDAMENTALS

- Module A: Security concepts
- Module B: Enterprise security strategy
- Module C: Security program components

CHAPTER 2: RISK MANAGEMENT

- Module A: Understanding threats
- Module B: Risk management programs
- Module C: Security assessments

CHAPTER 3: CRYPTOGRAPHY

- Module A: Cryptography concepts
- Module B: Public key infrastructure

CHAPTER 4: NETWORK CONNECTIVITY

- Module A: Network attacks
- Module B: Packet flow

CHAPTER 5: NETWORK SECURITY TECHNOLOGIES

- Module A: Network security components
- Module B: Monitoring tools

CHAPTER 6: SECURE NETWORK CONFIGURATION

- Module A: Secure network protocols
- Module B: Hardening networks

CHAPTER 7: AUTHENTICATION

- Module A: Authentication factors
- Module B: Authentication protocols

CHAPTER 8: ACCESS CONTROL

- Module A: Access control principles
- Module B: Account management

CHAPTER 9: SECURING HOSTS AND DATA

- Module A: Malware
- Module B: Securing data
- Module C: Securing hosts

CHAPTER 10: SECURING SPECIALIZED SYSTEMS

- Module A: Mobile security
- Module B: Embedded and specialized systems

CHAPTER 11: APPLICATION SECURITY

- Module A: Application attacks
- Module B: Securing applications

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CHAPTER 12: CLOUD SECURITY

- Module A: Virtual and cloud systems
- Module B: Securing cloud services

CHAPTER 13: ORGANIZATIONAL SECURITY

- Module A: Social engineering
- Module B: Security policies
- Module C: User roles and training
- Module D: Physical security and safety

CHAPTER 14: DISASTER PLANNING AND RECOVERY

- Module A: Business continuity
- Module B: Resilient systems
- Module C: Incident response procedures

APPENDIX A: GLOSSARY