



Lionfish Cyber Security Course Syllabus:

CompTIA Security+

Interactive and entertaining talk-show style format presented by industry leading experts.

- 40+ hours of virtual training, practice exams, and study.
- Receive a Certificate of completion
- Presented by highly qualified, industry leading experts
- 12 Months Access (Unless indicated otherwise)
- * The CompTIA bundle comes with practice exams.





DESCRIPTION

CompTIA Security+ focuses in on the latest trends in risk management, risk mitigation, threat management, and intrusion detection. This certification will allow you to demonstrate your cybersecurity skills and abilities to employers.

CURRICULUM

Overview

CompTIA Security+ is the certification globally trusted to validate foundational, vendor-neutral IT security knowledge and skills. As a benchmark for best practices in IT security, this certification covers the essential principles for network security and risk management – making it an important steppingstone of an IT security career.

CompTIA Security+ is the first security certification IT professionals should earn. It establishes the core knowledge required of any cybersecurity role and provides a springboard to intermediate-level cybersecurity jobs. Security+ incorporates best practices in hands-on troubleshooting to ensure security professionals have practical security problem-solving skills. Cybersecurity professionals with Security+ know how to address security incidents – not just identify them. Security+ is compliant with ISO 17024 standards and approved by the US DoD to meet directive 8140/8570.01-M requirements.

Objectives

- Provide operational, information, application and infrastructure level security
- Secure the network to maintain availability, integrity, and confidentiality of critical information
- Operate within a set of rules, policies, and regulations wherever applicable
- Comprehend Risk identification and mitigation

Prerequisites

IT security professionals with a minimum of two years' experience in IT administration with a focus on security; users with basic day-to-day technical information security experience; those interested in gaining a broader and deeper knowledge of security concerns and implementation; and learners preparing for the Security+ exam



Target Audience

- The series is intended for aspiring IT security professionals entering into security.
- The professionals who are Systems Administrator Network Administrator Security Administrator Junior IT Auditor/Penetration Tester

CURRICULUM Syllabus

CompTIA Security+	
#	Episode Name
1	Promo
2	Introduction to Security+ SY0-501
	Chapter 1 - Risk Management
1	The CIA of Security
2	What is Risk?
3	Threat Actors
4	Managing Risk
5	Using Guides for Risk Assessment
6	Security Controls
7	Interesting Security Controls
8	Defense in Depth
9	IT Security Governance
10	Security Policies
11	Frameworks
12	Quantitative Risk Calculations
13	Business Impact Analysis
14	Organizing Data
15	Security Training
16	Third-Party Agreements

Chapter 2 - Cryptography

- 1 Cryptography Basics
- 2 Cryptographic Methods
- 3 Symmetric Cryptosystems
- 4 Symmetric Block Modes
- 5 RSA Cryptosystems



- 6 Diffie-Hellman
- 7 PGP/GPG
- 8 Hashing
- 9 HMAC
- 10 Stenography
- 11 Certificates and Trust
- 12 Public Key Infastucture
- 13 Cryptographic Attacks

Chapter 3 - Identity and Access Management

- 1 Identification
- 2 Authorization Concepts
- 3 Access Control List
- 4 Password Security
- 5 Linux File Permissions
- 6 Windows File Permissions
- 7 User Account Management
- 8 AAA
- 9 Authentication Methods
- 10 Single Sign-On

Chapter 4 - Tools of the Trade

- 1 OS Utilties, Part 1
- 2 OS Utilties, Part 2
- 3 Network Scanners
- 4 Protocol Analyzers
- 5 SNMP
- 6 Logs

Chapter 5 - Securing Individual Systems

- 1 Denial of Service
- 2 Host Threats
- 3 Man-in-the-Middle
- 4 System Resiliency
- 5 RAID
- 6 NAS and SAN
- 7 Physical Hardening
- 8 RFI, EMI, and ESD
- 9 Host Hardening
- 10 Data and System Security
- 11 Disk Encryption



- 12 Hardware/Firmware Security
- 13 Secure OS Types
- 14 Securing Peripherals
- 15 Malware
- 16 Analyzing Output
- 17 IDS and IPS
- 18 Automation Strategies
- 19 Data Destruction

Chapter 6 - The Basic LAN

- 1 LAN Review
- 2 Network Topologies Review
- 3 Network Zone Review
- 4 Network Access Controls
- 5 The Network Firewall
- 6 Proxy Servers
- 7 Honeypots
- 8 Virtual Private Networks
- 9 IPSec
- 10 NIDS/NIPS
- SIEM (Security Information and Event Management)

Chapter 7 - Beyond the Basic LAN

- 1 Wireless Review
- 2 Living in Open Networks
- 3 Vulnerabilities with Wireless Access Points
- 4 Cracking 802.11, WEP
- 5 Cracking 802.11, WPA and WPA2
- 6 Cracking 802.11, WPS
- 7 Wireless Hardening
- 8 Wireless Access Points
- 9 Virtualization Basics
- 10 Virtual Security
- 11 Containers
- 12 Infrastucture as a Service (IaaS)
- 13 Platform as a Service (PaaS)
- 14 Software as a Service (SaaS)
- 15 Deployment Models
- 16 Static Hosts
- 17 Mobile Connectivity



- 18 Deploying Mobile Devices
- 19 Mobile Enforcement
- 20 Mobile Device Management
- 21 Physical Controls
- 22 HVAC
 - Fire Suppression

Chapter 8 - Secure Protocols

- 1 Secure Encryption Applications and Protocols
- 2 Network Models
- 3 Know Your Protocols TCP/IP
- 4 Know Your Protocols Applications
- 5 Transport Layer Security (TLS)
- 6 Internet Service Hardening
- 7 Protecting Your Servers
- 8 Secure Code Development
- 9 Secure Deployment Concepts
- 10 Code Quality and Testing

Chapter 9 - Testing Your Infrastructure

- 1 Vulnerability Scanning Tools
- 2 Vulnerability Scanning Assessment
- 3 Social Engineering Principles
- 4 Social Engineering Attacks
- 5 Attacking Applications
- 6 Attacking Web Sites
- 7 Exploiting a Target
- 8 Vulnerability Impact

Chapter 10 - Dealing with Incidents

- 1 Incident Response
- 2 Digital Forensics
- 3 Contingency Planning
- 4 Backups

Overview

Prepare for the CompTIA Security+ exam with the excellent practice tests. Enabling you to practice on test questions and assess your skill and knowledge of the material. Get certified the best way



- Applies to the current SY0-501 exam
- Includes many practices questions
- Requires Windows, macOS, Chrome OS, or Linux (iOS and Android not supported)
- Single-user license

Learn includes:

- Interactive learning with flashcards and performance-based questions.
- Videos that demonstrate key concepts and processes.
- Customizable learning plan.
- Easy self-assessments.
- Learning progress analytics and reporting.



Sample Certificate upon completions of each course



To learn more, contact us at 877-732-6772 or info@lionfishcybersecurity.com

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