

CompTIA CySA+
Course certification training

Course Agenda

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- Module 1 – Threat Management 1
- Module 2 – Threat Management 2
- Module 3 – Vulnerability Management
- Module 4 – Cyber Incident Response
- Module 5 – Security Architecture

Course Curriculum

Module 1 – Threat Management 1

- Cybersecurity Analysts
- Cybersecurity Roles and Responsibilities
- Frameworks and Security Controls
- Risk Evaluation
- Penetration Testing Processes

- Reconnaissance Techniques
- The Kill Chain
- Open Source Intelligence
- Social Engineering
- Topology Discovery
- Service Discovery
- OS Fingerprinting

Module 2 – Threat Management 2

- Security Appliances
- Configuring Firewalls
- Intrusion Detection and Prevention
- Configuring IDS
- Malware Threats
- Configuring Anti-virus Software
- Sysinternals
- Enhanced Mitigation Experience Toolkit

- Logging and Analysis
- Packet Capture
- Packet Capture Tools
- Monitoring Tools
- Log Review and SIEM
- SIEM Data Outputs
- SIEM Data Analysis
- Point-in-Time Data Analysis

Module 3 – Vulnerability Management

- Managing Vulnerabilities
- Vulnerability Management Requirements
- Asset Inventory
- Data Classification
- Vulnerability Management Processes
- Vulnerability Scanners
- Microsoft Baseline Security Analyzer
- Vulnerability Feeds and SCAP
- Configuring Vulnerability Scans
- Vulnerability Scanning Criteria
- Exploit Frameworks

- Remediating Vulnerabilities
- Analyzing Vulnerability Scans
- Remediation and Change Control
- Remediating Host Vulnerabilities
- Remediating Network Vulnerabilities
- Remediating Virtual Infrastructure Vulnerabilities

- Secure Software Development
- Software Development Lifecycle
- Software Vulnerabilities
- Software Security Testing
- Interception Proxies

- Web Application Firewalls
- Source Authenticity
- Reverse Engineering

Module 4 – Cyber Incident Response

■ Incident Response

- Incident Response Processes
- Threat Classification
- Incident Severity and Prioritization
- Types of Data

■ Forensics Tools

- Digital Forensics Investigations
- Documentation and Forms
- Digital Forensics Crime Scene
- Digital Forensics Kits
- Image Acquisition
- Password Cracking
- Analysis Utilities

■ Incident Analysis and Recovery

- Analysis and Recovery Frameworks
- Analyzing Network Symptoms
- Analyzing Host Symptoms
- Analyzing Data Exfiltration
- Analyzing Application Symptoms
- Using Sysinternals
- Containment Techniques
- Eradication Techniques
- Validation Techniques
- Corrective Actions

Module 5 – Security Architecture

■ Secure Network Design

- Network Segmentation
- Blackholes, Sinkholes, and Honeypots
- System Hardening
- Group Policies and MAC
- Endpoint Security

■ Managing Identities and Access

- Network Access Control
- Identity Management
- Identity Security Issues
- Identity Repositories
- Context-based Authentication
- Single Sign On and Federations
- Exploiting Identities
- Exploiting Web Browsers and Applications

■ Security Frameworks and Policies

- Frameworks and Compliance
- Reviewing Security Architecture
- Procedures and Compensating Controls
- Verifications and Quality Control
- Security Policies and Procedures
- Personnel Policies and Training