**CompTia CySA+**

**Duration : 5 Days.**

## 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