

# Details Course Outlines

## Module-01

### Cisco Cyber Ops Introduction

- ✓ Introduction
- ✓ Kali Linux

## Module-02

### Network Concepts

- ✓ Network Fundamentals
- ✓ Network Protocols - ICMP
- ✓ Network Protocols - ARP
- ✓ Network Protocols - DHCP
- ✓ Network Protocols - DNS
- ✓ Network Devices
- ✓ Firewalls
- ✓ IPS & AMP
- ✓ Email & Web Security
- ✓ Inline Traffic Interrogation, Taps & NetFlow
- ✓ Network Concepts

## Module-03

### Security Concepts

- ✓ CIA Triad
- ✓ Defense in Depth Strategy
- ✓ Vulnerabilities
- ✓ Exploits & Risks
- ✓ Security Terms & Access Control Models
- ✓ Threat Hunting
- ✓ Zero Trust
- ✓ Threat intelligence platform (TIP)
- ✓ Authentication, Authorization, Accounting
- ✓ Rule-based, Time-based & Role-based Access Control
- ✓ CVSS 3.0 & 5-tuple
- ✓ Rule-based detection vs. Behavioral and Statistical detection
- ✓ Rule-based, Time-based & Role-based Access Control

## Module-04

### Security Monitoring

- ✓ Attack Surface Analysis
- ✓ Network Attacks
- ✓ Web Application Attacks
- ✓ Endpoint-Based Attacks
- ✓ Social Engineering and Phishing Attacks
- ✓ Evasion Methods
- ✓ Network Logging & Packet Captures
- ✓ NetFlow & Application Visibility and Control (AVC)
- ✓ Monitoring Challenges
- ✓ NextGen IPS Event Types
- ✓ Encryption and Hashing
- ✓ PKI

## Module -05

### Host-Based Analysis

- ✓ Microsoft Windows - Introduction
- ✓ Microsoft Windows - Terms
- ✓ Microsoft Windows File System
- ✓ Linux - Introduction
- ✓ Linux - Terms
- ✓ Linux File System
- ✓ Endpoint Protection
- ✓ Whitelisting and Blacklisting
- ✓ Systems-Based Sandboxing
- ✓ System Logs
- ✓ Indicators of Compromise and Attack
- ✓ Evidence and Attribution

## Module -06

### Network Intrusion Analysis

- ✓ Common Artifact Elements and Protocol Headers
- ✓ Security Analysis with Wireshark
- ✓ NetFlow v5 and Security Events
- ✓ Map Events to Source Technologies
- ✓ Impact Flaps with the Firepower Management Center (FMC)
- ✓ Interpret Basic Regular Expressions
- ✓ Application Layer Protocols (SMTP/POP3/IMAP/HTTP/HTTPS/HTTP2)

## Module -07

### Security Policies and Procedures

- ✓ Security Management
- ✓ NIST.SP800-61 r2
- ✓ Apply the incident handling process (such as NIST.SP800-61) to an event
- ✓ CSIRT & Network Profiling
- ✓ PCI & Server Profiling
- ✓ HIPAA & SOX
- ✓ PSI & Intellectual Property
- ✓ SOC Metrics
- ✓ Cyber Kill Chain Model