

Week 1

- Class Introduction
- LAB Topology
- Class Agenda
- Basic Student Assessment
- Security Certification
- Cisco Security Architecture
- Network Security - ASA
- Basic ASA Configuration
- ASA Management
- ASA Deployment Scenarios
- ASA Traffic Flow

Week 2

- Network Security - ASA
- Dynamic Routing (RIP, OSPF, EIGRP, BGP)
- NAT
- Modular Policy Framework (Inspection Policy)
- Virtual Firewall
- Active/Active Failover
- Transparent Firewall
- Threat Detection & Botnet Traffic Filtering
- QoS
- ID Firewall
- Firewall Clustering
- PBR on ASA

Week 3

- Network Security - Next Generation Firewall (NGFW)
- Introduction to FirePOWER
- FirePOWER on ASA
- FirePOWER Traffic Flow
- Device Management
- Object Management
- Access Control Policy
- AD Integration

Week 4

Network Security - Next Generation Firewall (NGFW)

FireSIGHT Technology

File Detection and FireAMP

IPS Policy and Preprocessors

SSL Decryption

Correlation Policies

Event Analysis and Reporting

Week 5

Network Security - VPN

IPSec theory

PKI

VPN types and modes

Configuring Site-to-Site VPNs

Week 6

Network Security - VPN

EasyVPN for S2S VPN

DMVPN

Week 7

Network Security - VPN

GET VPN

IKEv2 theory

FlexVPN

Week 8

Network Security - Remote Access VPN

EasyVPN (DVTI)

SSL VPN theory

Clientless VPN

Week 9

Network Security - Remote Access VPN

Introduction to AnyConnect

Mobile User Security
VPN Load Balancing and HA

Week 10

Content Security - Web Security
Web proxy deployment modes
L4TM
User Identity & Authentication
Web Security Policies
URL Filtering
Bandwidth Control
Application Visibility & Control (AVC)
Content Security - Web Security
SSL Decryption
Outbound Data Security

Week 11

Content Security - Email Security
How SMTP works
SMTP Relay deployment
ESA Packet Flow
Reputation Filters
Message Filters
Anti-Spam & Anti-Virus
Content Security - Email Security
Content Filters
Outbreak Filters
Data Loss Prevention (DLP)
Email Encryption (GRES)

Week 12

Secure Access - AAA
Introducing to AAA
Setup AAA Clients
Using TACACS+ for Administrators
Using RADIUS for Network Access (802.1x)

Introducing to Cisco ISE
AD Integration
Configuring MAB

Week 13
Secure Access - AAA
Configuring Wired 802.1x
Configuring Wireless 802.1x
Guest Access
Device Profiling
BYOD & MDM
L2 Security

Week 14
Network Security - Routers
Router ACL
Configuring Zone-Based Firewall on Router
Router Hardening
Configuring NAT on Routers
NetFlow and Traffic Monitoring

Week 15
All-in-one LAB #1

Week 16
All-in-one LAB #2