**Fortinet FortiGate Firewall (NSE4)**

This course is focused on:

* IT Professional
* System Administrator
* Support Analysts
* Security Manager

**Course Duration:**

* **24 Hours**, 12 Classes, 2 Hours per class (weekly 2 Days)

**Lesson 01: Internetworking Basic**

* Network Security fundamentals
* Introduction to Firewall Technologies.
* Introduction About Fortinet FortiGate
* Firewall Sizing
* Network analysis & Device deployment

**Lesson 02: Fortigate Firewall Dashboard**

* Install FortiGate Firewall On VMWare.
* FortiGate Firewall Dashboard.
* FortiGate Firewall Initial Working Lab.
* FortiGate OS Upgradation (Online & Offline)
* Firewall operations & Services

**Lesson 03: Redundant Interface in Fortigate with VLAN**

* Firewall Administration
* Firewall deployment mood
* FortiGate Firewall Interfaces and Zones.
* Configure and Verify VLAN and Zone Lab.
* Configure and Verify One-Armed Sniffer Lab
* Configure Redundant Interface in FortiGate
* Configure Aggregate Interface in FortiGate.
* Configure Virtual Wire Pair in FortiGate.

**Lesson 04: Configure Routing & Lab**

* Administrative Access in FortiGate Firewall.
* Configure DNS & DNS Server In FortiGate.
* Static, Default, Dynamic and Policy Route Theory.
* Configure & Verify Static & Default Route Lab
* Configure and Verify Policy Routing Lab

**Lesson 05: Dynamic Protocols**

* Configure and Verify Dynamic Protocol OSPF.
* Configure and Verify Routing Redistribution.
* Configure and Verify Dynamic Protocol BGP.
* FortiGate Firewall Policies Theory

**Lesson 06: Services and IP address Based Policy FortiGate Firewall**

* MAC Address Based Policy in FortiGate Firewall
* Local User Based Policy in FortiGate Firewall
* IP Address Based Policy in FortiGate Firewall.
* Services and Schedule Based Policy in FortiGate.
* FortiGate Firewall DHCP Server Theory.

**Lesson 07: Fortigate Firewall as DHCP Server Lab**

* FortiGate Firewall as DHCP Server .
* FortiGate Firewall as DHCP Relay
* FortiGate Firewall License Activation.
* FortiGate Firewall Security Profile & FortiGuard
* FortiGate Firewall Replacement Messages.

**Lesson 08: Security Profile**

* Security Profile Antivirus Profile
* Security Profile Web Filter Profile.
* Security Profile DNS Filter.
* Security Profile Application Control
* Security Profile Intrusion Prevention.

**Lesson 09: Firewall Different Mode**

* Security Profile File Filter.
* FortiGate Firewall Inspection Mode.
* FortiGate Firewall NGFW Modes.
* Policy-Based Mode to Block Facebook App
* Policy-Based Mode for Default Services

**Lesson 10: FortiGate Firewall Modes (Transparent).**

* Configure and Verify IPv4 DoS Policy
* Network Address Translation Theory
* Policy , Source ,Interface Overload NAT Lab
* Policy,Source,Overload NAT Lab
* FortiGate Firewall Modes (Transparent).

**Lesson 11: NAT Theory**

* Network Address Translation Theory
* Policy,Source,Interface Overload NAT Lab.
* Policy,Source,Overload NAT Lab
* Policy,Source,One-To-One NAT Lab.
* Policy,Source,Fixed Port Range NAT Lab.
* Policy,Source, Port Block Allowcation NAT Lab.
* Source NAT, Central Secure NAT (SNAT)
* Destination NAT, Virtual IP in Security Policy

**Lesson 12: High Availability Theory**

* Destination NAT, Virtual IP with Central SNAT.
* Addresses Objects in FortiGate Firewall.
* Services Objects in FortiGate Firewall.
* High Availability (HA) Theory.
* High Availability HA Active-Passive Lab

**Lesson 13: Authentication with AD**

* High Availability HA Active-Active Lab
* FortiGate Authentication With AD & Lab Setup
* FortiGate Active Authentication(AD).
* FortiGate Passive Authentication (AD).
* Configure & Verify Virtual Domains (VDOMs).

**Lesson 14: IPSec VPN and Firmware Upgrade**

* Site-to-Site IPSec Route-Based VPN Template Lab.
* Site-to-Site IPsec Route-Based VPN Custom Lab
* Configure SNMP V1/V2 and SNMP V3 in FortiGate

**Lesson 15: Traffic Shaping and SSL VPN**

* Configure Syslog in FortiGate Firewall.
* Traffic Shaping Shared Shaper and Per IP Shaper.
* Remote Access SSL VPN Web Portal Theory & Lab.
* Remote Access IPSec VPN Theory and Lab

**Lesson 16: Traffic Shaping and SSL VPN**

* Troubleshooting FortiGate Firewall.
* Fundamental CLI Commands in FortiGate Firewall.
* Configure and Verify Packet Capture in FortiGate