JOIN US

CCNP ENTERPRISE CERTIFICATION PROVES YOUR SKILLS WITH CISCO ENTERPRISE NETWORKING SOLUTIONS.

Overview

CORE NETWORKING CLASSES

GET TRAINING BY CERTIFIED TRAINERS AND INDUSTRY EXPERTS

Training Type
Online

Course Duration
1.5 Months

No of Hours
2 Hours/Day

Certificate
CCNP Enterprise

Skill Level
Intermediate

Study Material
Yes

Batches Available
Weekdays/Weekends

CISCO CERTIFIED CCNP

CCNP ADVANCED ROUTING

START YOUR LEARNING WITH CORE NETWORKING CLASSES

COURSE CONTENT

BE EXPERT IN CCNP ADVANCED ROUTING

01 Fundamental Routing Concepts

- Characteristics of Routing Protocols
- Routing Decision
- Routing Protocol Selection
- Network Topology Fundamentals
  o Unicast
  o Broadcast
  o Multicast
  o Anycast
- Remote Site Connectivity
- MPLS Based Virtual Private Networks
- Tunnel Based Virtual Private Networks

02 VPN Technology

- MPLS Layer 2 VPN
- MPLS Layer 3 VPN
- GRE Point to Point
- GRE Multipoint
- DMVPN

03 IGP Routing Protocols

- RIP Understanding
- RIP Messages
- RIP Timers
- Poison Reveres
- Update Process
- Configuring RIP Protocol
- Verifying RIP
- IPv6 Review and RIPng
- Verifying RIPng

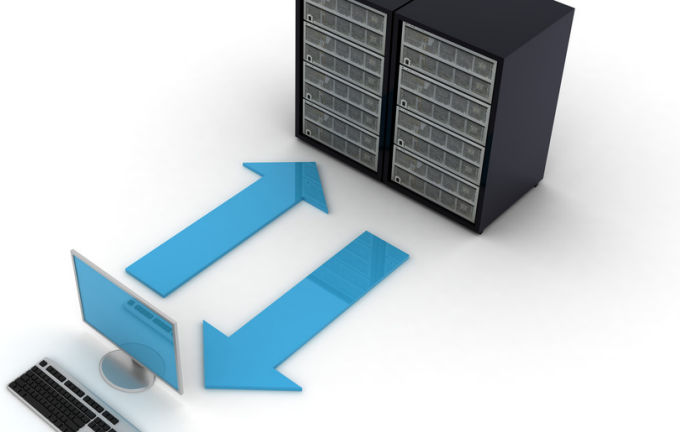### 04 Fundamental EIGRP Concepts

- EIGRP Neighborship
- Configuration & Verification
- Advanced EIGRP Concepts
- EIGRP Topology Tables
- EIGRP Update Process
- EIGRP Metric Tuning
- EIGRP Load Balancing
- EIGRP Convergence
- Route Filtering using ACL, Prefix-list & Route-map
- Configuration EIGRP for IPv6
- Verifying EIGRP for IPv6
- Configuring EIGRP for Named Mode
- Named Mode Parameters
- Named Mode Features

05 Fundamental OSPF Concepts

- OSPF Review
- OSPF Neighbors and Adjacencies on LAN's
- OSPF Neighbors and Adjacencies on WAN's
- OSPF Network Type
- OSPF DR & BDR Concepts
- The OSPF Link-State Database
- LSA and the OSPF Link-State Database
- The Database Exchange Process
- Advanced OSPF Concepts
- OSPF Route Cost Calculation
- OSPF Metric Tuning
- OSPF Database Flooding
- OSPF over DMVPN
- OSPF Loop prevention
- OSPF Route Filtering
- Route Summerization
- Normal and Stub Areas
- Default Route Originate Process
- OSPF version 3

08 BGP

- Basic BGP Process
- Understanding BGP use and Benefits
- BGP ASNs
- BGP States & Messages
- Fundamental BGP Concepts
- IBGP and EBGP Understanding
- Neighborship Configuration & Parameters
- IBGP & EBGP Loop Prevention
- Advanced BGP Concepts
- Verifying BGP Tables
- Injecting Routes into BGP
- Route Filtering and Clearing BGP Peers
- Inbound Outbound Path Manipulation
- BGP Path Attribute and Best-Path Algorithm
- BGP Single Homed
- BGP Dual Homed
- Single Multihomed
- Dual Multihomed
- Understanding IPv6 Internet Connectivity
- Configuring IPv6 BGP Neighborship
- Verifying IPv6 BGP Neighborship
- IPv6 Traffic Over IPv4 Address（Core BGP with IPv4）

10 Routing Protocol Authentication

- Authentication Method
- EIGRP Authentication
- OSPF Authentication
- BGP Authentication

06 Route Redistribution and Selection

- Understanding Route Redistribution
- Redistribution RIP to EIGRP & Vice Versa
- Redistribution EIGRP to OSPF & Vice Versa
- Redistribution RIP to OSPF & Vice Versa
- ASymetric Routing on Redistribution
- Domain Loop Problems with two Redistribution point
- Preventing Loop Problem
- Understanding Route Selection
- Cisco Express Forwarding
- Local Policy Based Routing
- Global Policy Based Routing
- Understanding VRF-Lite
- Configuring VRF Lite

07 Internet Connectivity

- Fundamentals of Internet Connectivity
- Static IP Address Assignment
- Dynamic IP Address Assignment
- Static NAT
- Dynamic NAT
- PAT
- Destination Based NAT

09 Router and Routing Security

- Fundamental Router Security Concepts
- Password Encryption Line vty
- Password Encryption Line Console