

# Cisco CCNP – Core Technologies ENCOR

### Why Learn Cisco CCNP – Core Technologies ENCOR?

This course covers advanced routing and infrastructure technologies, expanding on the topics covered in the Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR) course.

Expand your knowledge of enterprise infrastructure including dual-stack (IPv4 and IPv6) architecture, virtualization, infrastructure, network assurance, security, and automation.

#### Audience Profile :

- Mid-level network engineers
- Network administrators
- Network support technicians
- Help desk technicians

#### Prerequisites:

- Implementation of Enterprise LAN networks.
- Basic understanding of Enterprise routing and wireless connectivity.
- Basic understanding of Python scripting



## **Course Overview:**

- The core exam, Implementing and Operating Cisco Enterprise Network Core Technologies (350-401 ENCOR) focuses on your knowledge of enterprise infrastructure including dual-stack (IPv4 and IPv6) architecture, virtualization, infrastructure, network assurance, security, and automation.
- You can prepare for this exam by taking the training course, Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR).
- This course gives participants the skills and knowledge needed to implement core Enterprise infrastructure, including dual-stack (IPv4 and IPv6) architecture, virtualization, network assurance, security and automation.
- The Implementing Cisco Enterprise Advanced Routing and Services (ENARSI) v1.0 gives you the knowledge you need to install, configure, operate, and troubleshoot an enterprise network.
- Gain the knowledge and skills related to implementing core enterprise network technologies, including:
- Dual stack (IPv4 and IPv6) architecture
- Virtualization
- Infrastructure
- Network assurance
- Security
- Automation
- CCNP Enterprise concentration exam options:
- Implementing Cisco Enterprise Advanced Routing and Services v1.0 (300-410 ENARSI)
- Implementing Cisco SD-WAN Solutions (300-415 ENSDWI)
- Designing Cisco Enterprise Networks (300-420 ENSLD)
- Designing Cisco Enterprise Wireless Networks (300-425 ENWLSD)
- Implementing Cisco Enterprise Wireless Networks (300-430 ENWLSI)
- Automating and Programming Cisco Enterprise Solutions (300-435 ENAUTO)

# **Cisco CCNP – Core Technologies ENCOR Outline:**

- Examining Cisco Enterprise Network Architecture
- Understanding Cisco Switching Paths
- Implementing Campus LAN Connectivity
- Building Redundant Switched Topology
- Implementing Layer 2 Port Aggregation
- Understanding EIGRP
- Implementing OSPF
- Optimizing OSPF
- Exploring EBGP
- Implementing Network Redundancy
- Implementing NAT
- Introducing Virtualization Protocols and Techniques
- Understanding Virtual Private Networks and Interfaces
- Understanding Wireless Principles
- Examining Wireless Deployment Options
- Understanding Wireless Roaming and Location Services
- Examining Wireless AP Operation
- Understanding Wireless Client Authentication
- Troubleshooting Wireless Client Connectivity
- Introducing Multicast Protocols
- Introducing QoS
- Implementing Network Services
- Using Network Analysis Tools
- Implementing Infrastructure Security
- Implementing Secure Access Control
- Understanding Enterprise Network Security Architecture
- Exploring Automation and Assurance Using Cisco DNA Center
- Examining the Cisco SD-Access Solution
- Understanding the Working Principles of the Cisco SD-WAN Solution
- Understanding the Basics of Python Programming
- Introducing Network Programmability Protocols
- Introducing APIs in Cisco DNA Center and vManage
- Investigate the CAM
- Analyze Cisco Express Forwarding
- Troubleshoot VLAN and Trunk Issues
- Tuning Spanning Tree Protocol (STP) and Configuring Rapid Spanning Tree Protocol (RSTP)
- Configure Multiple Spanning Tree Protocol
- Troubleshoot EtherChannel
- Implement Multi-area OSPF
- Implement OSPF Tuning
- Apply OSPF Optimization
- Implement OSPFv3
- Configure and Verify Single-Homed EBGP
- Implementing Hot Standby Routing Protocol (HSRP)
- Configure Virtual Router Redundancy Protocol (VRRP)
- Implement NAT



 $\sqrt{\rm Offline}$  Classroom Instructor-Led Training in our labs or onsite Locations.

✓ Virtual Instructor-Led Training Via Virtual
Video Conferencing Tools.

## Why Learners Prefer CLS as their Training Services provider ?

- Premuim Training Services Accredited from Global Technology Vendors.
- Best Rated Experts & Certified Trainers in Egypt.
- Official Training Hours, Practice Labs, Handson Learning.
- CLS Training Classrooms are designed with High Edge PCs and Training Facilities.
- Return on Training Investment is Guaranteed to boost performance.



