

## Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR) V1.4

### Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR) V1.4

The Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR) v1.4 training gives you the knowledge and skills needed to configure, troubleshoot, and manage enterprise wired and wireless networks. You'll also learn how to implement security principles, automation, and programmability within an enterprise network, and overlay network design by using Cisco SD-Access and SD-WAN solutions. This training also earns you 64 Continuing Education (CE) credits toward recertification.

#### How you'll benefit

This class will help you:

- Configure, troubleshoot, and manage enterprise wired and wireless networks
- Implement security principles, automation, and programmability within an enterprise network
- Overlay network design by using Cisco SD-Access and SD-WAN solutions
- Prepare for the 350-401 ENCOR v1.1 exam
- Earn 64 CE credits toward recertification

#### Why Attend with Current Technologies CLC

- Our Instructors are in the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

#### Who Should Attend

The primary audience for this course is as follows:

- Entry to Mid-level Network Engineers
- Network Administrators
- Network Support Technicians
- Help Desk Technicians

#### Prerequisites

There are no prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are:

- Understanding of how to implement enterprise LAN networks
- Basic understanding of enterprise routing and wireless connectivity
- Basic understanding of Python scripting

#### Course Duration

5 days

#### Course Price

\$4,295.00 or 43 CLCs

#### Methods of Delivery

- Instructor Led
- Virtual ILT
- On-Site

## OUTLINE

Module 1: Examining Cisco Enterprise Network Architecture

Module 2: Exploring Cisco Switching Paths

Module 3: Implementing Campus LAN Connectivity

Module 4: Building Redundant Switched Topology

Module 5: Implementing Layer 2 Port Aggregation

Module 6: Implementing OSPF

Module 7: Optimizing OSPF

Module 8: Explaining EIGRP

Module 9: Exploring EBGp

Module 10: Implementing Network Redundancy

Module 11: Implementing NAT

Module 12: Introducing Virtualization Protocols and Techniques

Module 13: Exploring Virtual Private Networks and Interfaces

Module 14: Examining Wireless Deployment Options

Module 15: Examining Wireless AP Operation

Module 16: Implementing Wireless Client Authentication

Module 17: Troubleshooting Wireless Client Connectivity

Module 18: Implementing Network Services

Module 19: Introducing Multicast Protocols

Module 20: Introducing QoS

Module 21: Using Network Analysis Tools

Module 22: Implementing Infrastructure Security

Module 23: Implementing Secure Access Control

Module 24: Discovering the Basics of Python Programming

Module 25: Introducing Network Programmability Protocols

Module 26: Explaining Wireless Principles

Module 27: Exploring Wireless Roaming and Location Services

Module 28: Exploring Enterprise Network Security Architecture

Module 29: Exploring Cisco Catalyst Center—Network Automation and Management

Module 30: Examining the Cisco SD-Access Solution

Module 31: Exploring the Working Principles of the Cisco Catalyst SD-WAN Solution

Module 32: Introducing APIs in Cisco Catalyst Center and Cisco Catalyst SD-WAN Manager

## **LAB OUTLINE**

Lab 1: Investigate the CAM

Lab 2: Analyze Cisco Express Forwarding

Lab 3: Troubleshoot VLAN and Trunk Issues

Lab 4: Tune STP and Configure RSTP

Lab 5: Configure Multiple STP

Lab 6: Troubleshoot EtherChannel

Lab 7: Implement Multiarea OSPF

Lab 8: Implement OSPF Tuning

Lab 9: Apply OSPF Optimization

Lab 10: Implement OSPFv3

Lab 11: Configure and Verify Single-Homed EBGP

Lab 12: Implement HSRP

Lab 13: Configure VRRP

Lab 14: Implement NAT

Lab 15: Configure and Verify VRF

Lab 16: Configure and Verify a GRE Tunnel

Lab 17: Configure Static VTI Point-to-Point Tunnels

Lab 18: Configure Wireless Client Authentication in a Centralized Deployment

Lab 19: Troubleshoot Wireless Client Connectivity Issues

Lab 20: Configure Syslog

Lab 21: Configure and Verify Flexible NetFlow

Lab 22: Configure Cisco IOS EEM

Lab 23: Troubleshoot Connectivity and Analyze Traffic with Ping, Traceroute, and Debug

Lab 24: Configure and Verify Cisco IP SLAs

Lab 25: Configure Standard and Extended ACLs

Lab 26: Configure Control Plane Policing

Lab 27: Implement Local and Server-Based AAA

Lab 28: Write and Troubleshoot Python Scripts

Lab 29: Explore JSON Objects and Scripts in Python

Lab 30: Use NETCONF Via SSH

Lab 31: Use RESTCONF with Cisco IOS XE Software