

## IMPLEMENTING AND OPERATING CISCO SERVICE PROVIDER NETWORK CORE TECHNOLOGIES (SPCOR) V1.1

### IMPLEMENTING AND OPERATING CISCO SERVICE PROVIDER NETWORK CORE TECHNOLOGIES (SPCOR) V1.1

The Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR) v1.1 course teaches you how to configure, verify, troubleshoot, and optimize next-generation, Service Provider IP network infrastructures. It provides a deep dive into Service Provider technologies including core architecture, services, networking, automation, quality of services, security, and network assurance.

#### How you'll benefit

This class will help you:

- Configure, verify, troubleshoot, and optimize next-generation, Service Provider IP network infrastructures
- Deepen your understanding of Service Provider technologies including core architecture, services, networking, automation, quality of services, security, and network assurance
- Prepare to take the 350-501 Implementing and Operating Cisco® Service Provider Network Core Technologies (SPCOR)
- 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:

- Network Engineers
- Network Administrators
- Network Managers
- Network Designers
- Systems Engineers
- Project Managers

#### Course Duration

5 days

#### Course Price

\$4,295.00 or 43 CLCs

#### Methods of Delivery

- Instructor Led
- Virtual ILT
- On-Site

#### OUTLINE

##### Module 1: Describing Service Provider Network Architectures

##### Module 2: Describing Cisco IOS Software Architectures

##### Module 3: Implementing OSPF

**Module 4: Implementing IS-IS**

**Module 5: Implementing BGP**

**Module 6: Implementing Route Maps and Routing Protocol for LLN [Low-Power and Lossy Networks] (RPL)**

**Module 7: Transitioning to IPv6**

**Module 8: Implementing High Availability in Networking**

**Module 9: Implementing MPLS**

**Module 10: Implementing Cisco MPLS Traffic Engineering**

**Module 11: Describing Segment Routing**

**Module 12: Describing VPN Services**

**Module 13: Configuring L2VPN Services**

**Module 14: Configuring L3VPN Services**

**Module 15: Implementing Multicast**

**Module 16: Describing QoS Architecture**

**Module 17: Implementing QoS**

**Module 18: Implementing Control Plane Security**

**Module 19: Implementing Management Plane Security**

**Module 20: Implementing Data Plane Security**

**Module 21: Introducing Network Programmability**

**Module 22: Implementing Automation and Assurance**

**Module 23: Introducing Cisco NSO**

**Module 24: Implementing Virtualization in Service Provider Environments**

## LAB OUTLINE

- **Lab 1: Deploy Cisco IOS XR and IOS XE Basic Device Configuration**
- **Lab 2: Implement OSPF Routing**
- **Lab 3: Implement Integrated IS-IS Routing**
- **Lab 4: Implement Basic BGP Routing**
- **Lab 5: Filter BGP Prefixes Using RPL**
- **Lab 6: Implement MPLS in the Service Provider Core**
- **Lab 7: Implement Cisco MPLS Traffic Engineering (TE)**
- **Lab 8: Implement Segment Routing**
- **Lab 9: Implement Ethernet over MPLS (EoMPLS)**
- **Lab 10: Implement MPLS L3VPN**
- **Lab 11: Implement BGP Security**
- **Lab 12: Implement Remotely Triggered Black Hole (RTBH) Filtering**