SPCOR - IMPLEMENTING AND OPERATING CISCO SERVICE PROVIDER NETWORK CORE TECHNOLOGIES V1.2

Course Code: 100507

Configure, verify, troubleshoot, and optimize Cisco next-generation Service Provider IP network infrastructures.

The *SPCOR - Implementing and Operating Cisco Service Provider Network Core Technologies v1.2* 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.

This course also helps you prepare to take the Implementing and Operating Cisco Service Provider Network Core Technologies (350-501 SPCOR) exam, which is part of the new CCNP Service Provider certification and the Cisco Certified Specialist – Service Provider Core certification.

This course is eligible for 64 Continuing Education Credits (ILT & ELT Modality).

What You'll Learn

After completing this course, you should be able to:

- 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
- Validate your knowledge and prepare to take the Implementing and Operating Cisco Service Provider Network Core Technologies (350-501 SPCOR) exam

Who Needs to Attend

- Network administrators
- Network engineers
- Network managers
- System engineers
- Project managers

- Network designers

Prerequisites

- Intermediate knowledge of Cisco IOS or IOS XE
- Familiarity with Cisco IOS or IOS XE and Cisco IOS XR Software configuration
- Knowledge of IPv4 and IPv6 TCP/IP networking
- Intermediate knowledge of IP routing protocols
- Understanding of MPLS technologies
- Familiarity with VPN technologies

SPCOR - IMPLEMENTING AND OPERATING CISCO SERVICE PROVIDER NETWORK CORE TECHNOLOGIES V1.2

Course Code: 100507

VIRTUAL CLASSROOM LIVE	$4,300 USD	5 Day

Virtual Classroom Live Outline

- Describing Service Provider Network Architectures
- Describing Cisco IOS Software Architectures
- Implementing OSPF
- Implementing IS-IS
- Implementing BGP
- Implementing Route Maps and Routing Protocol for LLN [Low-Power and Lossy Networks] (RPL)
- Transitioning to IPv6
- Implementing High Availability in Networking
- Implementing MPLS
- Implementing Cisco MPLS Traffic Engineering
- Describing Segment Routing
- Describing VPN Services
- Configuring L2VPN Services
- Configuring L3VPN Services
- Implementing Multicast
- Describing QoS Architecture
- Implementing QoS
- Implementing Control Plane Security
- Implementing Management Plane Security
- Implementing Data Plane Security
- Introducing Network Programmability
- Implementing Automation and Assurance
- Introducing Cisco NSO
- Implementing Virtualization in Service Provider Environments

Virtual Classroom Live Labs

- Deploy Cisco IOS XR and IOS XE Basic Device Configuration
- Implement OSPF Routing
- Implement Integrated IS-IS Routing
- Implement Basic BGP Routing
- Filter BGP Prefixes Using RPL
- Implement MPLS in the Service Provider Core
- Implement Cisco MPLS Traffic Engineering (TE)
- Implement Segment Routing
- Implement Ethernet over MPLS (EoMPLS)
- Implement MPLS L3VPN
- Implement BGP Security
- Implement Remotely Triggered Black Hole (RTBH) Filtering

Dec 15 - 19, 2025 | 8:30 AM - 4:30 PM EST

Feb 9 - 13, 2026 | 8:30 AM - 4:30 PM EST

Apr 20 - 24, 2026 | 8:30 AM - 4:30 PM EDT

skillsoft global knowledge™

SPCOR - IMPLEMENTING AND OPERATING CISCO SERVICE PROVIDER NETWORK CORE TECHNOLOGIES V1.2

Course Code: 100507

ON-DEMAND	$1,000 USD

On-Demand Outline

- Describing Service Provider Network Architectures
- Describing Cisco IOS Software Architectures
- Implementing OSPF
- Implementing IS-IS
- Implementing BGP
- Implementing Route Maps and Routing Protocol for LLN [Low-Power and Lossy Networks] (RPL)
- Transitioning to IPv6
- Implementing High Availability in Networking
- Implementing MPLS
- Implementing Cisco MPLS Traffic Engineering
- Describing Segment Routing
- Describing VPN Services
- Configuring L2VPN Services
- Configuring L3VPN Services
- Implementing Multicast
- Describing QoS Architecture
- Implementing QoS
- Implementing Control Plane Security
- Implementing Management Plane Security
- Implementing Data Plane Security
- Introducing Network Programmability
- Implementing Automation and Assurance
- Introducing Cisco NSO
- Implementing Virtualization in Service Provider Environments

On-Demand Labs

- Deploy Cisco IOS XR and IOS XE Basic Device Configuration
- Implement OSPF Routing
- Implement Integrated IS-IS Routing
- Implement Basic BGP Routing
- Filter BGP Prefixes Using RPL
- Implement MPLS in the Service Provider Core
- Implement Cisco MPLS Traffic Engineering (TE)
- Implement Segment Routing
- Implement Ethernet over MPLS (EoMPLS)
- Implement MPLS L3VPN
- Implement BGP Security
- Implement Remotely Triggered Black Hole (RTBH) Filtering

SPCOR - IMPLEMENTING AND OPERATING CISCO SERVICE PROVIDER NETWORK CORE TECHNOLOGIES V1.2

Course Code: 100507

PRIVATE GROUP TRAINING	5 Day

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.

Date created: 8/30/2025 8:12:51 AM