

# Cisco Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR) v1.0

Duration: 40.00 hours (5 days)

32.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

## Course Information

**Delivery Format:** Other

**Certification:** CCNP Service Provider

**Related Exam:** 350-501

## Course Overview

This 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 350-501 Implementing and Operating Cisco® Service Provider Network Core Technologies (SPCOR) exam, which is part of the new CCNP® Service Provider certification and the Cisco Certified Specialist Service Provider Core certification.

## About This Course

This 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 350-501 Implementing and Operating Cisco® Service Provider Network Core Technologies (SPCOR) exam, which is part of the new CCNP® Service Provider certification and the Cisco Certified Specialist Service Provider Core certification.

## Who Should Attend

---

Network administrators

Network engineers

Network managers

System engineers

Project managers

Network designers

# Learning Outcomes

---

**Upon successful completion of this course, participants will be able to:**

After taking this course, you should be able to:

- Describe the Service Provider network architectures, concepts, and transport technologies
- Describe the Cisco Internetwork Operating System (Cisco IOS®) software architectures, main IOS types, and their differences
- Implement Open Shortest Path First (OSPF) in the Service Provider network
- Implement Integrated Intermediate System-to-Intermediate System (IS-IS) in the Service Provider network
- Implement Border Gateway Protocol (BGP) routing in Service Provider environments
- Implement route maps and routing policy language
- Describe IPv6 transition mechanisms used in the Service Provider networks
- Implement high-availability mechanisms in Cisco IOS XR software
- Implement traffic engineering in modern Service Provider networks for optimal resource utilization
- Describe segment routing and segment routing traffic engineering concepts
- Describe the VPN technologies used in the Service Provider environment
- Configure and verify Multiprotocol Label Switching (MPLS) L2VPN in Service Provider environments
- Configure and verify MPLS L3VPN in Service Provider environments
- Implement IP multicast services
- Describe the Quality of Service (QoS) architecture and QoS benefits for SP networks
- Implement QoS in Service Provider environments
- Implement control plane security in Cisco devices
- Implement management plane security in Cisco devices
- Implement data plane security in Cisco devices
- Describe the Yet Another Next Generation (YANG) data modeling language
- Implement automation and assurance tools and protocols
- Describe the role of Cisco Network Services Orchestrator (NSO) in Service Provider environments
- Implement virtualization technologies in Service Provider environments

## ▣ Certification Path

CCNP Service Provider

Exam: 350-501

## Additional Course Details

---

Nexus Humans Cisco Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR) v1.0 training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the Cisco Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR) v1.0 course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

# Frequently Asked Questions

---

## **Q: What delivery options are available for Cisco Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR) v1.0?**

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
  - Traditional Instructor-Led Classroom Training (ILT)
  - On-site delivery at your offices anywhere in United Kingdom
  - Private dedicated courses customized for your team
- 

## **Q: What certification does this course prepare me for?**

The Cisco Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR) v1.0 course helps prepare you for the CCNP Service Provider certification path.

---

## **Q: Which exam does this course prepare me for?**

This course prepares you for the 350-501 official exam. You can take this exam at any exam center across United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online wherever you are located.

---

## **Q: How many CPD hours does this course provide?**

The 5-day Cisco Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR) v1.0 course provides up to 32.5 CPD hours of structured learning. CPD certificates can be provided upon request.

---

## **Q: What is the duration of the Cisco Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR) v1.0 training?**

The training takes place over 5 day(s), with each day lasting approximately 40.00 hours including breaks for lunch and refreshments.

---

## Q: Do you provide corporate training for Cisco Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR) v1.0?

Yes, we provide corporate training, dedicated training, and closed classes for Cisco Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR) v1.0. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

---

## Q: Why choose Nexus Human for Cisco Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR) v1.0?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:


- Small Firms Best Trainer Award
  - National Training Partner of the Year (Ireland) - Multiple Years
  - Global Top 30 Instructor Awards (2012, 2019, 2021)
  - Tech Excellence Award Nominations
  - Learning Performance Institute (LPI) External Training Provider Sponsor 2024
- 

## Q: Are there any discount codes available?


Yes! Use discount code **PENPALS** when booking your Cisco Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR) v1.0 training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

# Nexus Human

## Professional Training & Development

 Email: [info@nexushuman.com](mailto:info@nexushuman.com)

 Website: [www.nexushuman.com](http://www.nexushuman.com)

 Phone: +353 1 XXX XXXX (Ireland) | +44 20 XXXX XXXX (UK)