

20 Days

Cisco CCNP Service Provider

The CCNP Service Provider Course is for service provider network engineers, systems engineers, and network specialists who are responsible for delivering a scalable carrier-grade infrastructure capable of rapid expansion to support ongoing introduction of new managed services and other customer requirements.

The Cisco CCNP Service Provider Certification is achieved through the following exams & training:

Required Exam & Training:

- 642-883 Deploying Cisco Service Provider Network Routing (SPROUTE)
- 642-885 Deploying Cisco Service Provider Advanced Network Routing (SPADVROUTE)
- 642-887 Implementing Cisco Service Provider Next-Generation Core Network Services (SPCORE)
- 642-889 Implementing Cisco Service Provider Next-Generation Edge Network Services (SPEDGE)

Course Details

Course Outline

1. Deploying Cisco Service Provider Network Routing (SPROUTE)

- 1.0 OSPFv2 and OSPFv3 Routing in Service Provider Environments
- 2.0 IS-IS, IPv4, and IPv6 in Service Provider Environments
- 3.0 BGP Routing in Service Provider Environments
- 4.0 Route Manipulations in Service Provider Environments
- 5.0 High Availability Routing Features

2. Deploying Cisco Service Provider Advanced Network Routing (SPADVROUTE)

- 1.0 BGP Routing Features in a Service Provider IP NGN Environment
- 2.0 Multicast Routing in a Service Provider IP NGN Environment
- 3.0 IPv6 in a Service Provider IP NGN Environment
- 4.0 High Availability Routing Features

3. Implementing Cisco Service Provider Next-Generation Core Network Services (SPCORE)

- 1.0 QOS in a Service Provider IP NGN Environment

- 2.0 MPLS/LDP in a Service Provider IP NGN Environment
- 3.0 MPLS/LDP in a Service Provider IP NGN Environment
- 4.0 Transport Technologies

4. Implementing Cisco Service Provider Next-Generation Edge Network Services (SPEDGE)

- 1.0 VPN in Service Provider IP NGN Environments
- 2.0 MPLS layer 3 VPNs in Service Provider IP NGN Environments
- 3.0 Layer 2 VPNs in Service Provider IP NGN Environments
- 4.0 Carrier Ethernet in Service Provider IP NGN Environments

Who Should Attend

- Channel Partner / Reseller
- Customer
- Employee

Pre Requisite

The following will act as a prerequisite:

- Valid Cisco CCNA Service Provider
- Valid Cisco CCIP
- Any Cisco CCIE certification

Exams

Deploying Cisco Service Provider Network Routing (SPROUTE) [642-883]

Deploying Cisco Service Provider Advanced Routing (SPADVROUTE) [642-885]

Implementing Cisco Service Provider Next-Generation Core Network Services (SPCORE) [642-887]

Implementing Cisco Service Provider Next-Generation Edge Network Services (SPEDGE) [642-889]

Date - May 29, 2026