

Cisco Certified Network Professional (CCNP) Service Provider

Course Outline

Core Service Provider Technologies (SPCOR)

Topics

- Service Provider Architecture
- Service Provider Network Implementation
- MPLS and Segment Routing
- Service Provider Security
- Quality of Service (QoS)

Advanced Routing (SPRI)

Topics

- Advanced Routing Protocols (OSPF, IS-IS, BGP)
- MPLS VPNs
- Route Redistribution and Policy Control
- High Availability and Fast Convergence

Service Provider VPN Services (SPVI)

Topics

- Layer 2 and Layer 3 VPNs
- MPLS VPN Architecture
- VPN Service Deployment
- VPN Troubleshooting

Service Provider Network Automation (SPNA)

Topics

- Network Programmability and Automation
- Automation Tools and Techniques
- API Integrations
- Network Orchestration

Service Provider Advanced Quality of Service (SPQoS)

Topics

- QoS Concepts and Mechanisms
- QoS Design and Deployment
- Traffic Shaping and Policing
- QoS Monitoring and Troubleshooting

Service Provider Security (SPSec)

Topics

- Security Fundamentals for Service Providers
- Secure Network Access and Identity Management
- Infrastructure Security
- Security Policy and Best Practices