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## Implementing Cisco Service Provider Next Generation EDGE Network Services

**Duration: 5 Days**    **Course Code: SPEDGE**

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### Overview:

The Implementing Cisco Service Provider Next-Generation Edge Network Services (SPEDGE) course is designed to provide service provider professionals with information on the use of service provider VPN solutions. The goal is to train professionals to enable service provider point of presence (POP) to provide Layer 2 and Layer 3 VPNs. The instruction is reinforced with hands-on labs to ensure that students thoroughly understand how to implement VPNs within their networks.

The course also includes classroom activities with remote labs that are useful to gain practical skills on deploying Cisco IOS and IOS XE and Cisco IOS XR features to operate and support service provider networks.

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### Target Audience:

This course is designed for: Network administrators, network engineers, network managers, and systems engineers who would like to implement MPLS VPN service in their networks Network designers and project managers. The course is also recommended for all individuals preparing for CCNP Service Provider certification

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### Objectives:

- Upon completing this course, the learner will be able to meet these overall objectives:
  - Introduce the VPN technologies that are used in the service provider environment and the Multiprotocol Label Switching (MPLS) VPN peer-to-peer architecture
  - Describe the implementation steps that are needed to provide MPLS Layer 3 VPN service in service provider networks
  - Describe how the MPLS Layer 3 VPN model can be used to implement managed services and Internet access
  - Describe Layer 2 VPNs and Ethernet services
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### Prerequisites:

The knowledge and skills that a learner must have before attending this course are as follows:

- Basic computer literacy
- Basic Microsoft Windows navigation skills
- Basic Internet usage skills
- Basic knowledge of networking concepts
- Intermediate knowledge of Cisco IOS/IOS XE and Cisco IOS XR Software configuration

To gain the prerequisite skills and knowledge, Cisco strongly recommends the knowledge of the following courses:

- Deploying Cisco Service Provider Network Routing (SPROUTE)
  - Deploying Cisco Service Provider Advanced Network Routing (SPADVROUTE)
  - Implementing Cisco Service Provider Next-Generation Core Network Services (SPCORE)
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### Testing and Certification

- SPEDGE is one of four courses required for the Cisco Certified Network Professional (CCNP) Service Provider Certification
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## Content:

### VPN Technologies

- Introducing VPNs
- Introducing MPLS VPNs

### MPLS Layer 3 VPNs

- Implementing MPLS Layer 3 VPN Backbones
- Connecting Customers Using Simple Routing Protocols
- Connecting Customers Using BGP or OSPF
- Deploying IPv6 and MPLS

### Complex MPLS Layer 3 VPNs

- Implementing Complex MPLS Layer 3 VPNs
- Implementing Internet Access and MPLS Layer 3 VPNs
- Introducing MPLS Interdomain Solutions

### Layer 2 VPNs and Ethernet Services

- Introducing Layer 2 VPNs
- Introducing AToM
- Implementing VPLS

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## Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142

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