

# SPCORE (IMPLEMENTING CISCO SERVICE PROVIDER NEXT-GENERATION CORE NETWORK SERVICES)

## Objetivo

This course is designed to help students prepare for Cisco CCNP SP certification. It introduces the concepts of Multi Protocol Label Switching (MPLS) and describes its implementation as well as exploring the MPLS Traffic Engineering (MPLS-TE) services built on the MPLS technology. The course enables learners to use the technology principles of basic Quality of Service, and Quality of Service with MPLS to implement advanced features and functions. The focus of the course is on technology issues of MPLS and on best practices for implementing QoS from the Service Providers perspective and how to configure some of those features and functions in an existing routed environment.

## Público Alvo

Channel Partner / Reseller Customer Employee

## Pré-Requisitos

SPNGNG1, SPNGN2, SPROUTE and SPADVROUTE Recommended

## Carga Horária

40 horas (5 dias).

## Conteúdo Programático

Module 1: Multiprotocol Label Switching  
Lesson 1: Introducing Cisco IP NGN Architecture  
Lesson 2: Introducing MPLS  
Lesson 3: Introducing MPLS Applications  
Lesson 4: Label Distribution Protocol  
Lesson 5: Introducing MPLS Forwarding  
Lesson 6: Operating MPLS Forwarding  
Lesson 7: Implementing MPLS in the Service Provider Core  
Module 2: MPLS Traffic Engineering  
Lesson 1: Introducing MPLS Traffic Engineering Components  
Lesson 2: MPLS Traffic Engineering Operations  
Lesson 3: Implementing MPLS TE  
Lesson 4: Protecting MPLS TE Traffic  
Module 3: QoS in the Service Provider Network  
Lesson 1: Understanding QoS

Lesson 2: Implementing QoS in the SP Network  
Hardware Lab 3: The Need for QoS  
Lesson 3: Implementing MPLS Support for QoS  
Module 4: QoS Classification and Marking  
Lesson 1: Understanding Classification and Marking  
Lesson 2: Using Modular QoS CLI  
Lesson 3: Implementing Advanced QoS Techniques  
Module 5: QoS Congestion Management and Avoidance  
Lesson 1: Managing Congestion  
Lesson 2: Implementing Congestion Avoidance  
Module 6: QoS Traffic Policing and Shaping  
Lesson 1: Understanding Traffic Policing and Shaping  
Lesson 2: Implementing Traffic Policing  
Lesson 3: Implementing Traffic Shaping