

# **Delivery Type:** Classroom **Duration:** 5 days

#### **Overview**

This 5 day course is designed to provide professionals working with medium to large networks with the skills and knowledge required to incorporate advanced routing concepts when implementing scalability for Cisco routers that are connected to LANs and WANs. Delegates will be able to dramatically increase the number of routers and sites using these techniques instead of redesigning the network when additional sites or wiring configurations are added.

#### **Target Audience**

This course is intended for Network professionals who want to correctly implement routing based solutions within a given network design, using Cisco IOS services and features, where implementation includes planning, configuring and verification.

### **Pre-Requisites**

# Attendees should meet the following prerequisites:

- ✓ ICND1 Interconnecting Cisco Network Devices Part 1
- ✓ ICND2 Interconnecting Cisco Network Devices

#### Part 2 **Or**

✓ CCNABC Cisco CCNA Certification Fast Track Programme

Practical experience in installing, operating and maintaining Cisco routers & switches in an enterprise environment is recommended.

#### **Objectives**

# After you complete this course you will be able to:

- ✓ Plan and document the configuration and verification of routing protocols and its optimization in enterprise networks.
- ✓ Identify the technologies, components, and metrics of EIGRP to implement and verify EIGRP routing in diverse, large-scale internetworks based on requirements.
- ✓ Identify, analyze and match OSPF multiarea routing functions and benefits for routing efficiencies in network operations in order to implement and verify OSPF routing in a complex enterprise network.
- ✓ Implement and verify a redistribution solution in a multi-protocol network that uses IOS features to control path selection and loop free topology



according to a given network design and requirements.

- Evaluate common network performance issues and identify the tools needed to provide a layer 3 path control that uses IOS features to control the path.
- ✓ Implement and verify a Layer 3 solution using BGP to connect an enterprise network to a service provider.

### **Follow on Courses**

# The following courses are recommended for further study:

- ✓ SWITCH Switching (CCNP,CCDP)
- ✓ TSHOOT Troubleshooting and Maintaining Cisco IP Networks(CCNP)
- ✓ ARCH Designing Cisco Network Architectures (CCDP)
- ✓ QOS Implementing Cisco Quality of Service (CCIP)
- ✓ BGP Configuring BGP on Cisco Routers (CCIP)
- ✓ MPLS Implementing Cisco MPLS (CCIP)

### Certification

**Recommended preparation for exam(s):** <u>642-902</u> ROUTE - Implementing Cisco IP Routing

This exam is required for those delegates wishing to achieve either the Cisco Certified Network Professional, the Cisco Certified Internetwork Professional or the Cisco Certified Design Professional Certifications

#### **Further Information**

Please be aware that the DRM (Digital Rights Management) for the e-learning associated with this course has been protected so that the software can only be used on the pc it is initially downloaded onto. The instructor will go through this at the beginning of the course.

