

Routing (BSCI)

This course is intended for network administrators and support or design staff requiring a greater understanding of IP routing protocols, the issues, limitations and implementation of Cisco products in the deployment of a router based Internetwork.



Experts in Networking

0870 350 4000
www.ncat.co.uk
info@ncat.co.uk

The four day instructor led course explains how design, select and configure IP routing protocols to enable corporate size routing. This theme is expanded to understand how the Internet routing is achieved. The course is supplemented with many practical tips learnt from IP routing projects.

- **All exam topics are covered**
- **Authorised Cisco Instructors**
- **12 months post course support**

Course Pre-Requisites

Delegates are required to meet the following prerequisites:

- Completion of the CCNA course or equivalent
- A basic knowledge of the windows operating system

Course	Course Objectives
<p>Building Scaleable Cisco Internetworks</p> <p>This course forms part of the following Cisco certifications</p> <p>CCNP (Cisco Certified Network Professional)</p> <p>CCDP (Cisco Certified Design Professional)</p> <p>CCIP (Cisco Certified Internetworking Professional)</p> <p><u>Certification</u></p> <p>Required topics are covered for the Cisco exam:</p> <p>642-901 BSCI</p> <p><u>Duration</u></p> <p>4 days</p>	<p>Upon completion of this course, the delegate will be able to:</p> <ul style="list-style-type: none">• Converged network requirements of various network and networked applications within the Cisco network architectures• Using advanced IP address configuration techniques to optimize your network• Implementing and verifying EIGRP operations• Building a scalable multi-area network with OSPF• Configuring integrated IS-IS in a single area• Manipulating routing and packet flow• Implementing and verifying BGP for enterprise ISP connectivity• Implementing and verifying multicast forwarding using PIM and related protocols• Network reconfiguration to adapt to new technologies, including IPv6• Understanding IPv6 functions in order to satisfy the increasingly complex requirements of hierarchical addressing• IPv6 routing protocols

Course Content

- Network Requirements
- Introducing EIGRP
- Implementing and Verifying EIGRP
- Configuring Advanced EIGRP Options
- Configuring EIGRP Authentication
- Using EIGRP in an Enterprise Network
- Configuring OSPF
- Introducing the OSPF Protocol
- OSPF Packet Types
- Configuring OSPF Routing
- OSPF Network Types
- Link State Advertisements
- Configuring OSPF Route Summarization
- Configuring OSPF Special Area Types
- Configuring OSPF Authentication
- Introducing IS-IS and Integrated IS-IS Routing
- IS-IS Routing Operation
- Configuring Basic Integrated IS-IS
- Manipulating Routing Updates
- Operating a Network Using Multiple IP Routing Protocols
- Configuring and Verifying Route Redistribution
- Controlling Routing Update Traffic
- Implementing Advanced IOS Features: Configuring DHCP
- Explaining BGP Concepts and Terminology
- Explaining EBGP and IBGP
- Configuring Basic BGP Operations
- Selecting a BGP Path
- Using Route Maps to Manipulate Basic BGP Paths
- Explaining Multicast
- IGMP and Layer 2 Issues
- Explaining Multicast Routing Protocols
- Multicast Configuration and Verification
- Introducing IPv6
- Defining IPv6 Addressing
- Implementing Dynamic IPv6 Addresses
- Using IPv6 with OSPF and Other Routing Protocols
- Using IPv6 with IPv4