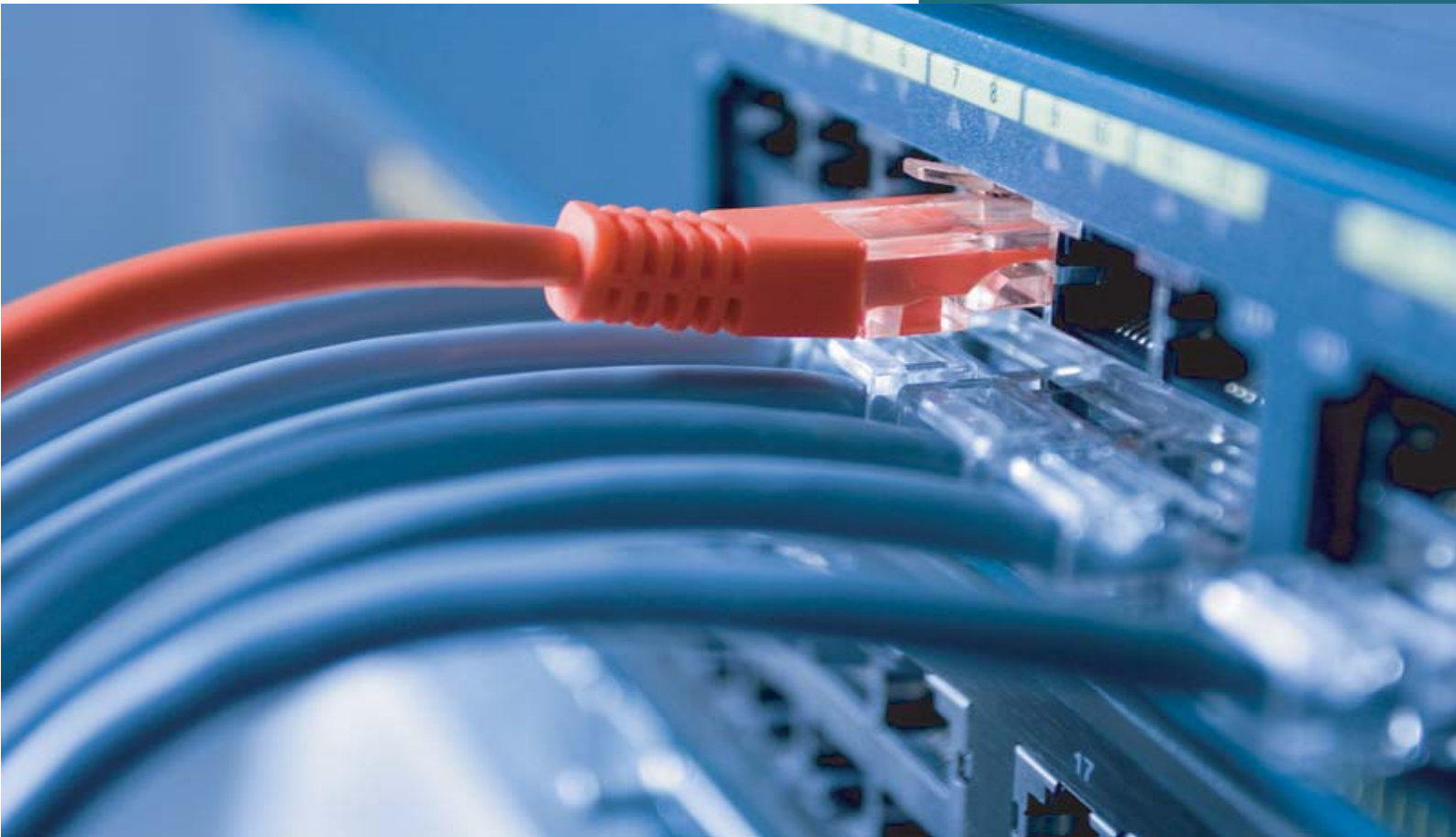


**Course Catalog
2012-2013**

CCNP R & S



CCNP Routing, Switching and T.Shoot Course

Cisco Certified Network Professional (CCNP) validates the ability to plan, implement, verify and troubleshoot local and wide-area enterprise networks and work collaboratively with specialists on advanced security, voice, wireless and video solutions. The CCNP certification is appropriate for those with at least one year of networking experience who are ready to advance their skills and work independently on complex network solutions. Those who achieve CCNP have demonstrated the skills required in enterprise roles such as network technician, support engineer, systems engineer or network engineer.

CCNP Modules

The **642-902 ROUTE** Exam Course will teach you how to implement advanced IP addressing plans and routing protocols in scalable Cisco networks. It will fully prepare you to pass the **642-902 ROUTE** exam, and is the only training you need, featuring both theoretical topics and practical examples.

The **642-813 SWITCH** Exam Course will prepare you to plan, implement and verify the complex LAN switching solutions based on Cisco's Campus Enterprise Architecture. During the over 30 hours of offline training you will learn about switching technologies, integration of VLANs, WLANs, voice and video into enterprise networks. Also, it includes detailed slides covering each of the technologies.

The **642-832 TSHOOT** Exam Course will prepare you to support complex enterprise networks and give you deep understanding of the ITIL-compliant approach to network troubleshooting. In addition to the over 30 hours of theory and command line interactions you are given detailed slides covering each of the technologies and methods used in troubleshooting.

Who Should Attend

The primary audience for this course is as follows:

- Network Administrators and Network Engineers
- CCNP candidates

Course Prerequisites

Valid Cisco Certified Network Associate (CCNA) certification or higher is recommended for students to enroll in the Cisco Certified Network Professional (CCNP) curriculum and thorough knowledge and understanding of LAN / WAN and Internet technologies.

Course Duration

60 Hours, 20 Classes, 3 Hours per Class

Course Details

Module 01: 642-902 ROUTE Course Outline

- Determine network resources needed for implementing EIGRP on a network
- Create an EIGRP implementation plan
- Create an EIGRP verification plan
- Configure EIGRP routing
- Document results of EIGRP implementation and verification
- Create an OSPF implementation plan
- Create an OSPF verification plan
- Configure OSPF routing
- Determine network resources needed for implementing eBGP on a network
- Create an eBGP implementation plan
- Create an eBGP verification plan
- Configure eBGP routing
- Document results of eBGP implementation and verification plan
- Create an IPv6 implementation plan
- Create an IPv6 verification plan
- Configure IPv6 routing
- Configure IPv6 interoperation with IPv4
- Document results of IPv6 implementation and verification plan
- Create a redistribution verification plan
- Configure a redistribution solution
- Verify that a redistribution was implemented
- Document results of a redistribution implementation and verification plan
- Identify the differences between implementing an IPv4 and IPv6 redistribution solution
- Create a Layer 3 path control verification plan
- Configure Layer 3 path control
- Verify that a Layer 3 path control was implemented
- Implement basic teleworker and branch services
- Describe broadband technologies
- Configure basic broadband connections
- Describe basic VPN technologies
- Configure GRE
- Describe branch access technologies

Module 02: 642-813 SWITCH Course Outline

- Introduction
- Campus Network Design
- Layer 2 Switching vs. Layer 3 Routing
- VLANs
- Trunking
- DTP, Trunking Allowed Lists & VTP
- Spanning Tree Protocol
- STP Optimization
- Cisco PVST+ Enhancements
- Rapid STP & Multiple STP
- MST Configuration
- STP Features
- EtherChannel
- Inter-VLAN Routing
- High Availability
- High Availability Part 2
- Layer 2 Security
- Layer 2 Voice & Video Support
- Wireless

Module 02: 642-813 SWITCH Course Outline

- EtherChannel
- Inter-VLAN Routing
- High Availability
- High Availability Part 2
- Layer 2 Security
- Layer 2 Voice & Video Support
- Wireless

Module 03: 642-832 TSHOOT Course Outline

- Troubleshoot EIGRP
- Troubleshoot OSPF
- Troubleshoot eBGP
- Troubleshoot routing redistribution solution
- Troubleshoot a DHCP client and server solution
- Troubleshoot NAT
- Troubleshoot first hop redundancy protocols
- Troubleshoot IPv6 routing
- Troubleshoot IPv6 and IPv4 interoperability
- Troubleshoot switch-to-switch connectivity for the VLAN based solution
- Troubleshoot loop prevention for the VLAN based solution
- Troubleshoot Access Ports for the VLAN based solution
- Troubleshoot private VLANS
- Troubleshoot port security
- Troubleshoot general switch security
- Troubleshoot VACL and PACL
- Troubleshoot switch virtual interfaces (SVIs)
- Troubleshoot switch supervisor redundancy
- Troubleshoot switch support of advanced services (i.e., Wireless, VOIP and Video)
- Troubleshoot a VoIP support solution
- Troubleshoot a video support solution
- Troubleshoot Layer 3 Security
- Troubleshoot issues related to ACLs used to secure access to Cisco routers
- Troubleshoot configuration issues related to accessing the AAA server for authentication purposes
- Troubleshoot security issues related to IOS services

