



New CCNP Routing and Switching courses ([ROUTE v2.0](#), [SWITCH v2.0](#) and [TSHOOT v2.0](#)) include major updates and follow an updated blueprint. Some older topics have been removed or simplified, while several new IPv6 routing topics have been added. Content has been adapted to Cisco IOS Software Release 15 and technically updated. The courses also introduce new type of labs, called discovery labs. Details of the content updates can be seen below.

## ROUTE

Removed	Added
Complex enterprise network requirements (Cisco Network Models, SONA Framework)	Basic Network and Routing Concepts
Implementation Planning and Documentation	Implementing RIPng
Advertising an IP Default Network in EIGRP	Configuring EIGRP for IPv6
EIGRP over Multipoint Subinterfaces	Discovering Named EIGRP Configuration
EIGRP Bandwidth Use Across WAN Links	Configuring OSPFv3
Details in OSPF over Different Frame Relay Implementations	Using Cisco Express Forwarding Switching
OSPF Virtual Links	Configuring NAT Virtual Interface
Implementation of NSSA and Totally NSSA OSPF Areas	Basic IPv6 Internet Connectivity
	Implementing BGP for IPv6
	Securing Cisco Routers

## SWITCH

Removed	Added
Cisco Service-Oriented Architecture (SONA)	Cisco SDM Templates
Cisco Lifecycle Services and Network Implementation	DHCP for IPv6
Syslog	NTP for IPv4 and IPv6, SNTP
SNMP Version 2 Configuration	SNMP Version 3 Configuration
Voice and Video in Campus Networks	SPAN
Integrating Wireless LAN	Switch Virtualization (StackWise, VSS)
	First Hop Redundancy for IPv6
	Storm Control

## TSHOOT

Removed	Added
FCAPS Model	Troubleshooting IPv6 Address Assignment on Clients
Troubleshooting TCAM Problems	Troubleshooting DHCP Snooping
Understanding Cisco IOS Switching Paths (Process Switching, Fast Switching, CEF)	Cisco TAC
Cisco IOS Firewall Security Feature	EIGRP Named Configuration
	Troubleshooting FHRP Tracking
	Troubleshooting GRE Tunnels
	Troubleshooting Policy Based Routing
	Troubleshooting EIGRP for IPv6
	Troubleshooting BGP for IPv6
	Troubleshooting OSPFv3 Address Families Feature