



How You Benefit

- Drive business outcomes and innovation by enabling digital-ready enterprise networks
- Scale expertise by building and validating Cisco Routing and Switching knowledge at all levels
- Solidify and expand your skills to support evolving network technologies
- Earn global recognition from an industry leader for your accomplishments

Demand for Trained and Experienced Routing and Switching Professionals

The digital transformation of business is driving adoption of programmable network architectures with a corresponding need for expanded skills and knowledge from network engineers. To meet these evolving job roles, Cisco continues to develop training and certification products that enable Enterprises to successfully innovate and migrate to a digital-ready network.

The program includes:

- **Skills Building:** Recommended tools to help you learn best practices and gain hands-on experience. From entry level to expert level, we offer instructor-led and self-paced training options with a hands-on focus for every learning style and budget.
- **Skills Validation:** Assess Cisco routing and switching knowledge and new skills proving to hiring managers that IT professionals are ready to design and deploy digital-ready network.
- **Skills Reinforcement:** Continually hone skills throughout your career as an Enterprise network engineer.

Gain Job-Ready Practical Skills

The CCENT, CCNA Routing and Switching, CCNP Routing and Switching, and CCIE Routing and Switching certification programs are practical, relevant, and job-ready certification curricula aligned closely with the specific tasks expected of these in demand professionals. Cisco realizes that the network professional increasingly must focus on design, configuration, and support responsibilities as the technical consultant, specialist or expert on a networking team. Therefore, the Cisco curriculum is specific to the best practices of network administrators, engineers, and experts using the latest Cisco network solutions.

Curriculum Overview

ROUTING & SWITCHING: [CCENT](#) > [CCNA](#) > [CCNP](#) > [CCIE](#) >

Cisco Certified Entry Networking (CCENT)

The CCENT certification validates the ability to install, operate and troubleshoot a small enterprise branch network, including basic network security.

Pre-requisite(s)	No Prerequisites
Topic Focus	<ul style="list-style-type: none"> • Network Fundamentals • LAN Switching Fundamentals • Routing Fundamentals • Infrastructure Services • Infrastructure Maintenance
Job Role(s)	Network Support Engineers
Experience Level (Years)	0-2
Required Exam(s)	100-105 ICND1
Recommended Training	Interconnecting Cisco Networking Devices Part 1

www.cisco.com/go/ccent

ROUTING & SWITCHING: [CCENT](#) > [CCNA](#) > [CCNP](#) > [CCIE](#) >

Cisco Certified Network Associate Routing and Switching (CCNA Routing and Switching)

Beyond basic networking skills, the Cisco CCNA Routing and Switching curriculum will expose IT professionals to software driven networking principles, virtualized networking functions and resources, IPv6, VPN technologies, QoS and the power of next generation technologies.

Pre-requisite(s)	No Prerequisites		
Topic Focus	<ul style="list-style-type: none"> • Combination of both ICND1 and ICND2 Topics 	<ul style="list-style-type: none"> • Network Fundamentals • LAN Switching Fundamentals • Routing Fundamentals • Infrastructure Services • Infrastructure Maintenance 	<ul style="list-style-type: none"> • LAN Switching Technologies • Routing Technologies • WAN Technologies • Infrastructure Services • Infrastructure Maintenance
Job Role(s)	Network Administrators, Network Specialist	Network Support Engineers	Network Administrators
Experience Level (Years)	1 - 3		
Required Exam(s)	200-125 CCNAX	100-105 ICND1	200-105 ICND2
Recommended Training	Interconnecting Cisco Networking Devices: Accelerated	Interconnecting Cisco Networking Devices Part 1	Interconnecting Cisco Networking Devices Part 2 (ICND2)

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ROUTING & SWITCHING: CCENT > CCNA > **CCNP** > CCIE >

Cisco Certified Network Professional Routing and Switching (CCNP Routing and Switching)

The CCNP Routing and Switching certification will distinguish network engineers who have 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.

Pre-requisite(s)	Valid CCNA Routing and Switching certification or any CCIE Certification can act as a prerequisite.		
Topic Focus	<ul style="list-style-type: none"> Implementing Secure Routers with Advanced IP Addressing 	<ul style="list-style-type: none"> Planning, configuring, and verifying the implementation of complex switching solutions 	<ul style="list-style-type: none"> Maintenance of complex routed and switched networks Network troubleshooting using technology-based practices
Job Role(s)	System Engineers	Network Consultants	System Integrators
Experience Level (Years)	3 - 6		
Required Exam(s)	300-101 ROUTE	300-115 SWITCH	300-135 TSHOOT
Recommended Training	Implementing Cisco IP Routing	Implementing Cisco IP Switched Networks	Troubleshooting and Maintaining Cisco IP Networks

www.cisco.com/go/ccnprs

ROUTING & SWITCHING: CCENT > CCNA > CCNP > **CCIE** >

Cisco Certified Internetwork Expert Routing and Switching (CCIE Routing and Switching)

Earn the highly regarded CCIE Routing and Switching certification and be among the elite and prove your ability to implement and troubleshoot complex networks improving uptime, increase user productivity and provide business agility.

Pre-requisite(s)	No Prerequisites		
Topic Focus	<ul style="list-style-type: none"> Configure, validate, and troubleshoot complex enterprise network infrastructure 	<ul style="list-style-type: none"> Understand how infrastructure components interoperate 	<ul style="list-style-type: none"> Translate functional requirements into specific device configurations
Job Role(s)	Senior Network Engineers		
Experience Level (Years)	7+		
Required Exam(s)	400-101 CCIE Routing and Switching Written Exam CCIE Routing and Switching Lab Exam v5		
Recommended Training	Expert Level Training for CCIE Routing and Switching		

www.cisco.com/go/cciers

