

CCNA V7.0

Course #1: Introduction to Networks (ITN)

Basic Network Connectivity and Communication

1. Networking Today
2. Basic Switch and Device Configuration
3. Protocols and Models

Ethernet Concepts

4. Physical Layer
5. Number Systems
6. Data Link Layer
7. Ethernet Switching

Communicating Between Networks

8. Network Layer
9. Address Resolution
10. Basic Router Configuration

IP Addressing

11. IPv4 Addressing
12. IPv6 Addressing
13. ICMP

Network Application Communications

14. Transport Layer
15. Application Layer

Building and Securing a Small Network

16. Network Security Fundamentals
17. Build a Small Network

Course #2: Switching, Routing, and Wireless Essentials (SRWE)

Switching Concepts, VLANs, and InterVLAN Routing

1. Basic Device Configuration
2. Switching Concepts
3. VLANs
4. Inter-VLAN Routing

Redundant Networks

5. STP
6. EtherChannel

Available and Reliable Networks

7. DHCPv4
8. SLAAC and DHCPv6 Concepts
9. FHRP Concepts

L2 Security and WLANs

10. LAN Security Concepts ¹
11. Switch Security Configuration ¹
12. WLAN Concepts ¹
13. WLAN Configuration ¹

Routing Concepts and Configuration

14. Routing Concepts
15. IP Static Routing
16. Troubleshoot Static and Default Routes

¹New/significantly changed content

Course #3: Enterprise Networking, Security, and Automation (ENSA)

OSPF Concepts and Configuration

1. Single-Area OSPFv2 Concepts
2. Single-Area OSPFv2 Configuration

Network Security

3. Network Security Concepts ¹
4. ACL Concepts
5. ACLs for IPv4 Configuration

WAN Concepts

6. NAT for IPv4
7. WAN Concepts
8. VPN and IPsec Concepts ¹

Optimize, Monitor, and Troubleshoot Networks

9. QoS Concepts
10. Network Management
11. Network Design
12. Network Troubleshooting

Emerging Network Technologies

13. Network Virtualization
14. Network Automation ¹