

# CCNA Routing & Switching V6.0

## 1 Introduction to Networks

1. Explore the Network
2. Configure a Network Operation System
3. Network Protocols and Communications
4. Network Access
5. Ethernet
6. Network Layer
7. IP Addressing
8. Subnetting IP Networks
9. Transport Layer
10. Application Layer
11. Build a Small Network

## 2 Routing and Switching Essentials

1. Routing Concepts
2. Static Routing
3. Dynamic Routing
4. Switched Networks
5. Switch Configuration
6. VLANs
7. Access Control Lists
8. DHCP
9. NAT for IPv4
10. Device Discovery, Management, and Maintenance

### **3 Scaling Networks**

1. LAN Design
2. Scaling VLANs
3. STP
4. EtherChannel and HSRP
5. Dynamic Routing
6. EIGRP
7. EIGRP Tuning and Troubleshooting
8. Single-Area OSPF
9. Multiarea OSPF
10. OSPF Tuning and Troubleshooting

### **4 Connecting Networks**

1. WAN Concepts
2. Point-to-Point Connections
3. Branch Connections
4. Access Control Lists
5. Network Security and Monitoring
6. Quality of Service
7. Network Evolution
8. Network Troubleshooting