

Course 7308-0100

## ICND TWO

**Duration:** 3 days

This course prepares you for Cisco exam **640-816 – Interconnecting Cisco Network Devices 2 (ICND2)**. To qualify as a Cisco Certified Network Associate (CCNA), you will also need to pass Cisco exam **640 – 822, Interconnecting Cisco Network Devices 1 (ICND1)**.

**Pre-requisites:** Before taking this course, you should have completed **Course 7307 – ICND ONE**.

### Module 1 Building Routed Networks

Configuring Static Routes

- Verifying and Troubleshooting Static Route Configurations
- Practical Lab 1.1 – Configuring Static Routes

Configuring OSPF

- Verifying and Troubleshooting OSPF Configurations
- Practical Lab 1.2 – Configuring OSPF

Configuring EIGRP

- Verifying and Troubleshooting EIGRP Configurations
- Practical Lab 1.3 – Configuring EIGRP

### Module 2 Security and Network Address Translation

IP Access Control Lists

- Creating Access Control Lists (ACLs)
- Assigning Access Control lists to Interfaces
- Verifying and Troubleshooting Access Control lists
- Practical Lab 2.1 – Configuring ACLs

Network Address Translation (NAT)

- Configuring, Verifying and Troubleshooting NAT through the CLI
- Practical Lab 2.2 – Configuring NAT

Configuring a Router as a DHCP Server through the CLI

- Practical Lab 2.3 – Configuring DHCP

Virtual Private Network (VPN) Security

### Module 3 Serial Line Configuration

HDLC (High-Level Data Link Control)

PPP (Point-to-Point Protocol)

Basic PPP and HDLC Configuration

- PPP Authentication
  - Password Authentication Protocol (PAP)
  - Challenge Handshake Authentication Protocol (CHAP)

- Verifying and Troubleshooting Serial Connections

Practical Lab 3.1 – Configuring PPP and CHAP

### Module 4 Frame Relay Configuration

Frame Relay Networks

Basic Frame Relay Configuration

- Verifying Frame Relay Configurations
- Troubleshooting Frame Relay Configurations
- Practical Lab 4.1 – Configuring Frame Relay

Frame Relay Topologies

### Module 5 VLAN Configuration

VLAN Switches – Basic Operation

Dynamic Port Assignment

VLAN Configuration

- Creating a VLAN
- Assigning an Access Port to a VLAN
- Verifying and Troubleshooting VLAN Operation
- Practical Lab 5.1 – Configuring VLANs

VLAN Trunking Protocol (VTP)

- Configuring a Trunk Port
- VTP Configuration, Verification and Troubleshooting
- Practical Lab 5.2 – Configuring VTP