Course Name: ICND2 (Interconnecting Cisco Network Devices 2)

Course Code: 5090

Course Overview: This hands-on Authorized Cisco course builds on the foundation provided by ICND1 (Interconnecting Cisco Network Devices 1), providing a technical foundation for the rest of the Authorized Cisco curriculum. Whether your goal is to familiarize yourself with Cisco technology or to become a Cisco Certified Internetworking Expert, ICND1 and ICND2 are the place to start.
This course not only delivers essential information needed to pass the CCNA certification exams, but it also includes comprehensive hands-on reinforcement to ensure that you add skills and not just knowledge. If you are new to Cisco, ICND2 prepares you for the tasks you will face on the job.

Course Length: 5 days

Who should attend: ICND2 is designed for those who have:

- A firm background in data networking
- Some hands-on experience with Cisco routers and switches
- Looking to increase their knowledge of installation, maintaining, and troubleshooting medium-sized switched and routed networks
- Who are looking to achieve the first level of Cisco certification, the CCNA. We strongly recommend that other students start with ICND1.

You will learn:

- Review how to configure and troubleshoot a switch and router in a small network environment
- Expand the switched network from a small to medium network environment
- Dangers of redundant switching
- Spanning Tree
- Concepts of VLANs and trunking
- Implementing VLSM
- Configure, verify, and troubleshoot OSPF
- Configure, verify, and troubleshoot EIGRP
- Determine when to use access control lists (ACLs)
- Configure, verify, and troubleshoot ACLs
- Configure NAT and PAT
- IPv6 addressing
- Configure PPP, CHAP, and PAP
- Frame Relay operation
- VPN solutions

Prerequisites:

ICND2 assumes a basic working knowledge of:

- Bridges and routers
- A complete understanding of the OSI model, IP addressing, and IP subnetting.

ICND1 is recommended and builds a strong foundation for this course. Understanding Networking Fundamentals and TCP/IP Networking also serve as prerequisites.

Course Fee: Call for quote

Customizable: No

Course Content:
Small Network Implementation
- Review Lab: Review of a Small Network Environment

Medium-Sized Switched Network Construction
- Implementing VLANs and Trunks
- Improving Performance with Spanning Tree
- Routing Between VLANs
- Securing the Expanded Network
- Troubleshooting Switched Networks

Medium-Sized Routed Network Construction
- Reviewing Routing Operations
- Implementing VLSM

Single Area OSPF Implementation
- Implementing OSPF
- Troubleshooting OSPF

EIGRP Implementation
- Implementing EIGRP
- Troubleshooting EIGRP

Access Control Lists (ACLs)
- ACL Operation
- Configuring and Troubleshooting ACLs

Address Space Management
- Scaling the Network with NAT and PAT
- Transitioning to IPv6

LAN Extension into a WAN
- Establishing a Point-to-Point WAN Connection with PPP
- Establishing a WAN Connection with Frame Relay
- Troubleshooting Frame Relay WANs

- Introducing VPN Solutions