**Internetworking Concept (INC)**

**DESCRIPTION**
This is the basic foundation of your network carrier. The training will teach you the basic understanding of internetworking. You will learn the topology, Ethernet, point-to-point and point to multipoint communication. There will be a deep discussion about OSI layer and TCP/IP, Bridge and Switch and also the management of IP address, including sub-netting.

**COURSE OUTLINE**

**OSI Model**
- Benefit of OSI
- Physical Layer
- Data Link Layer
- Network Layer
- Transport Layer
- Session Layer
- Presentation Layer
- Application Layer

**Network Topology**
- Shared Media, Ethernet
- Point to point protocol (PPP)
- Point to Multipoint with Frame Relay

**Understanding TCP/IP**
- Transmission Control Protocol
- User Datagram Protocol
- Internet Protocol
- ICMP
- ARP and RARP

**Bridge and Switch**
- Concept of Bridge and Switch
- Learning Bridge
- Switching Mode
- Collision Domain
- Broadcast Domain
- Spanning Tree Protocol

**Managing IP Address**
- IP Address Allocation
- Class of IP Addresses
- Managing Subnets

**Routing**
- Data transmission in local network
- Data transmission in non local network
- Static and Default Routing
- Dynamic Routing

**DURATION:** 2 days

**COURSE OBJECTIVE**
By the end of this course, participants are able to:

- Understand basic concept of internetworking
- Understand TCP/IP and OSI concept and implementation
- Perform TCP/IP sub-netting calculation and management of IP-based network
- Understand internetworking components such bridge, router and switch

**WHO SHOULD ATTEND**
Computer and Network Administrators, Network Designers, IT Managers, IT Consultants and IT Professionals, who are willing to use gain Cisco Certification in CCNA and CCDA.

**PRE-REQUISITES**
- Basic understanding of computer network
- Familiar with Windows environment

**RECOMMENDED TOPICS**
- Interconnecting Cisco Network Devices (ICND)
- Designing Cisco Network (DCN)