

The Internet Protocol (IP) is a protocol used for communicating data across a packet-switched internetwork using the Internet Protocol Suite, also referred to as TCP/IP. This course provides a good understanding of IP protocol & IP user protocols TCP & UDP. IP is the primary protocol in the Internet Layer of the Internet Protocol Suite and has the task of delivering distinguished protocol datagrams (packets) from the source host to the destination host solely based on their addresses.

Who Should Attend

This is beginner level course and suitable for telecom professionals & students who have little or no understanding of Internet Protocol.

Objective

After completing this course, the audience will be able to:

- Understand IP Overview & IP Subnets & Addresses
- Describe IP Routing & IP Header
- Explain ICMP Protocol
- Explain TCP Protocol
- Explain UDP Protocol

Course Contents

IP Overview

- What is IP ?
- IP History/Functions
- IP Datagram Fragmentation

IP Addresses

- Format
- Address Class/usage
- IP Addressing
- Subnetting

- **IP Routing**
 - Processing & Delivery of IP datagram
 - Routing table
 - Route Aggregation
- **IP Header**
 - IP Packet Format
 - IP Header Format
- **Internet Control Message Protocol**
 - What is ICMP ?
 - ICMP Packet Format
 - ICMP Message Types
 - PING
- **Transmission Control Protocol**
 - What is TCP ?
 - TCP/IP Protocol Architecture
 - TCP services
 - TCP Header Format
- **User Datagram Protocol**
 - What is UDP ?
 - UDP/IP Protocol Architecture
 - UDP Header Format