

|                             |   |
|-----------------------------|---|
| <b>Course Title:</b>        | <b>CCNA 4: Accessing the WAN</b>  |
| <b>Duration:</b>            | Ten (10) Days   |
| <b>Class Schedule:</b>      | 9:00am to 5:00pm  |
| <b>Target Participants:</b> | Government and Private I.T. Personnel, Members of the Academe and College Graduates of Computer Science and I.T. related courses.   |
| <b>Total Hours:</b>         | 70 Hours  |
| <b>Course Description:</b>  | This course explains the principles of traffic control and access control lists (ACLs) and provides an overview of the services and protocols at the data link layer for wide-area access. Students learn about user access technologies and devices and discover how to implement and configure Point-to-Point Protocol (PPP), Poin-to-Point Protocol over Ethernet (PPPoE), DSL, and Frame Relay. WAN security concepts, tunneling, and VPN basics are introduced. The course concludes with a discussion of the special network services required by converged applications and an introduction to quality of service (QoS). |

**Course Contents:**

- Managing Traffic:
  - Access Control Lists
- Addressing Hosts:
  - Network Address Translation
  - Dynamic Host Configuration Protocol and
  - IPv6 Basics
- Security
- Introduction to WAN Technologies
- WAN Devices and Connections:
  - CSU
  - Cable Modem and
  - DSL Modem
- Connecting to the WAN:
  - Leased Lines
  - Cable and
  - DSL
- Point-to-Point Protocol and Point-to-Point over Ethernet
- Frame Relay
- QoS Considerations
- Tunneling Concepts and VPN Basics
- Converged Networks