



IP Networking for Security: Network Transmission Mediums Course Outline
Course Time: 1 hour

Course Description

In this module, we will discuss in detail the various mediums that a network may use to transmit data.

There are three basic mediums used to transmit data; Category and coax cabling, Fiber optic and Wireless. Each method has its advantages and disadvantages, and we will look at the practical applications of each.

When you complete this course, you should be able to do the following:

- Properly identify, run and terminate Category network cabling,
- Identify, run and terminate coax cabling
- Identify and run fiber optic cabling,
- Apply wireless technology in your installations and,
- Choose the correct applications for each of the transmission mediums we've covered.

Course Outline

- Category Cabling
 - Cat 5 /5e
 - Cat 6
 - Future Cats
 - Pinouts
 - 568A
 - 568B
 - Wiring Faults
 - Open
 - Shorts
 - Ground
 - Crossed/Reversed Pairs
 - Bandwidth
- Fiber Optic
 - Fiber Optic Cable Construction
 - Transmission Characteristics
 - Security
 - Bandwidth
 - No Electromagnetic Interference
 - Distance
 - Connectors
 - Fiber Distributed Data Interface (FDDI)
- Wireless
 - Radio Wave Transmission Techniques
 - IEEE 802.11
 - Bluetooth
 - Cellular
 - Security
 - Authentication
 - Encryption
 - Wi-Fi Protected Access