



# Certificate in CCTV Installation Technician

Duration : 240 Hrs / 3 Months

## 1- CCTV Systems

- i. What are CCTV System ?
- ii. What are Security System?
- iii. How Television Works ?
- iv. Television System.

## 2. CCTV System Design

- i- Designing a CCTV System .
- ii. Aims of a surveillance Camera System
- iii. System design elements
- iv. Conditions for equipment Selections
- v. Camera Installation

## 3. Camera Selection

- i. Types of cameras used in CCTV system
- ii. Power Supply Systems
- iii. Camera Performance
- iv. Camera Functions
- v. Synchronization Methods
- vi. Camera Mounts

## 4. Lens Selection

- i. Angle of view settings
- ii. Lens Mount
- iii. Auto-Iris Lens

- iv. Types of lenses
- v. Lens Selection

### **5. Monitor Selection**

- i. Monitors
- ii. Reduced image scale on monitors
- iii. Notes on monitor installation

### **6. Switcher Selection & Video Recording**

- i. Sequential Switcher
- ii. Mufti- Viewer
- iii. Matrix Switcher
- iv. Multiplexer
- v. Time-lapse VCR recordings
- vi. Digital Video recorders (DVRs)

### **7. Sensor Type Selection**

- i. Infrared Sensors
- ii. Passive sensors
- iii. Motion detectors

### **8. Remote- Controlled Surveillance and Network Cameras**

- i. Remote- controlled surveillance
- ii. Network camera System

### **9. Video Signal and Control Signal Transmission**

- i. Coaxial Cables
- ii. Twisted-pair cable transmission
- iii. Control signal circuits
- iv. Electrical Power construction Requirements
- v. Making Drawings
- vi. Preparing block diagrams
- vii. CCTV drawing Symbols

## 10. Chip Level Repairing

- i- Basic Electronics : Testing and identification of all basic electronics components through multimeter .
- ii- Block Diagrams of DVR & Tracing

## 11. Networking

- i. Networking overview
- ii. Introduction to TCP/ IP
- iii. Subnet Masks
- iv. Gateway Address
- v. Virtual Ports
- vi. Pre-installation
- vii. What type of network Connection
- viii. Simple One to One Connection
- ix. Direct High Speed Modem Connection
- x. Router or LAN Connection
- xi. Linksys Port Forwarding
- xii. Dynamic DNS
- xiii. D-Link Forwarding
- xiv. Dynamic DNS
- xv. DDNS
- xvi. Creating a DDNS Accounting
- xvii. Viewing through Internet Explorer