

COURSE OUTLINE

MODULE -1

- Basic concept of CCTV camera and its work
- How many types of devices used for cctv installation work.
- What is Digital and Analog Technologies in CCTV Camera?
- Types of Camera according to design, specification and features.
- How to choose a CCTV Camera for different location and area?
- Camera Angle, Distance, Width, & Degree selection
- How to create a CCTV Cable for connection.
- Types of connectors for cctv camera installation work.
- Physical connection of storage device in DVR
- CCTV Camera Installation with DVR.
- How to create Network Cable (cat5, Cat6) with RJ45 connector for IP Camera installation.
- Process of IP Camera installation with NVR.
- How to connect mic and speaker with cctv camera

CCTV CAMERA FAULTS & REPAIRING SOLUTIONS

- Parts of CCTV camera
- Assembling and disassembling of different types CCTV Camera
- Working concept of CCTV camera parts
- Faults of cctv camera
- Repairing and solutions of cctv camera faults
- Practical of CCD camera (Two way communication camera)
- Cable connection and Socket knowledge of CCD camera

CAMERA LENSE & LIGHTING CONCEPT

- What is CCTV Camera Lenses?
- Difference between Manual Iris Lens & Auto Iris Lens.
- Difference between fix lenses and vari focal lenses.
- What is Lighting concept in CCTV camera installation work?
- Infrared and its Explanation according to distance.

POWER SUPPLY CONCEPT

- How many types of power supply used in cctv installation work
- Various voltage of camera, DVR and NVR – 24 V, 12 V, 19 V,
- Individual Plug in and common SMPS
- Selection of power supply according to project

TRANSMISSION MEDIA

- What is Transmission Media?
- Types of cable used for CCTV Cable
- Use of RCA, HDMI, RG6, RG11, RG58, Coax, Cat6, cat5 Cable
- Power supply concept according to cable distance

SWITCHER (CUSTOMIZED & READYMADE SWITCHER)

- What is switcher?
- How many types of switcher?
- How to connect Switcher with CCTV Camera
- Use of switcher

STORAGE DEVICE CONCEPT IN CCTV

- Types of storage device in cctv.
- T Physical connection of storage device.
- T Recording types of cctv camera for storage.
- T Complete knowledge of software for storage device management

DVR (Digital Video Recorder) & NVR (Network Video Recorder)

- What is DVR and NVR?
- Difference between DVR and NVR
- Types of DVR and NVR
- About all ports of DVR and NVR
- Practical on different types of DVR application Software

MODULE – 2

CCTV CAMERA ONLINE (NETWORKING)

- What is Networking concept in CCTV
- Concept of Network Cable Color Coding for connection
- LAN & WAN Network Setup Configuration
- About Routers and Modem
- About Control Panel of Routers
- How to take camera online on smartphone and Laptops
- How to Get reminder mail of camera error
- Practice on Android based application for DVR & NVR to view camera online

TROUBLE SHOOTING & BUSINESS CONCEPT

- Projects Legal Concept
- CCTV camera devices Marketing (Sales/Purchase)
- Projects Analysis and quotation