

# CCTV Technician Syllabus

- ❖ Introduction to CCTV installation
- ❖ Elements of a basic CCTV system:- Camera, monitor and digital recorder.
- ❖ *Camera types and uses:- Fixed and movable, indoor and outdoor, monochrome and colour, day and night.*
- ❖ *Camera specifications:- Sensitivity, signal to noise ratio and resolution.*
- ❖ *Lens types:- Fixed and variable focal length, manual and motorised zoom.*
- ❖ Scene illumination:- Lighting considerations, LED's, infrared lamp maintenance and bulb life.
- ❖ Switches, Quads, Multiplexers and control systems: – Types and applications.
- ❖ Monitors and Multiple screen displays.
- ❖ Recording the footage:- Analogue and Digital video recorders.
- ❖ Time-lapse recording. Reviewing video footage.
- ❖ Cables and connectors: – Types, uses, limitations, preparation and testing.
- ❖ Introduction to Digital CCTV and IP technology.
- ❖ Connection to other security systems.
- ❖ Use of test equipments.
- ❖ Relevant standards, issues and the “Operational Requirement”.
- ❖ The Analogue or Digital option? Changing technology and keeping updated.
- ❖ CCTV Video signals (H 264, Mpeg 2)
- ❖ Cabling and connectors (CAT5, CAT6 & Coax)
- ❖ Crimping BNC, CAT5 & keystone connectors
- ❖ Video transmission (analogue to digital, megapixel cameras)
- ❖ Assembling a CCTV system
- ❖ IP camera installation (IP installer for IP cameras, parameter setting)
- ❖ Introduction to lenses and lens theory (Field of view, vari focal and fixed lenses)
- ❖ Digital CCTV storage and lighting (DVR storage calculator, Illumination and camera sensitivity in CCTV)
- ❖ Network (LAN, WAN, IP)
- ❖ P2p connectivity
- ❖ CCTV site survey
- ❖ Legislation issues
- ❖ Mobile phone viewing configuration
- ❖ Configuring domain name server (DNS)
- ❖ Learning about different types of router
- ❖ What is DVR Stand Alone, How DVR Works, DVR Future
- ❖ Working Block Diagram of DVR Stand Alone device
- ❖ Various Models Showing
- ❖ Stand Alone DVR Full Configuration
- ❖ IP Camera and NVR technologies
- ❖ IP Camera and NVR Installation and Configuration
- ❖ Best brands, pricing and quotation process details