



# **Course: CCTV Camera and Surveillance System**

Code	City	hotel	Start	End	price	Language - Hours
773	Al Baha	Hotel Meeting	2026-05-10	2026-05-14	10950 SR	En - 25

#### **Overview**

The CCTV Training Program enhances the skills of the electronic security professional with the CCTV concepts and hands on training. With the rising demand for security in almost every building and campus, the need for CCTV and surveillance systems has grown. As a result, skilled people to develop and introduce the CCTV system are in high demand. The course cover basic principles, advanced design, and installation techniques. Hands-on installation and operation of CCTV systems for engineers and technicians interested in installation and maintenance. The course cover basic principles, advanced design, and installation techniques. Hands-on installation of CCTV systems and operational maintenance are covered for engineers and technicians involved in installation and maintenance. The learners can develop in-depth expertise and practical skills as a result of these courses. All of these courses are based on IP surveillance and incorporating analog surveillance with an IP network.

## **Course Outline**

- 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.
- Back Focus adjustment.
- Lens types:- Fixed and variable focal length, manual and motorised zoom.
- Use of lens calculator.
- 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
- Digital Recording systems Block Diagram using DVR
- Various Models Showing
- Stand Alone DVR Full Configuration



- IP Camera and NVR technologies
- IP Camera and NVR Installation and Configuration
- PoE Switch , Working with Baluns .
- Best brands in India , pricing and quotation process details
- Cloud Technologies related to CCTV Camera Security
- Setting up business , technical know how , marketing ideas , business startup procedures , vendor details

The Scandinavian Academy for Training Center adopts the latest scientific and professional methodologies in training and human resource development, aiming to enhance the efficiency of individuals and organizations. Training programs are delivered through a comprehensive approach that includes:

- Theoretical lectures supported by PowerPoint presentations and visual materials (videos and short films).
- Scientific evaluation of participants before and after the program to measure progress and knowledge acquisition.
- Brainstorming sessions and practical role-playing to simulate real-life scenarios.
- Case studies tailored to align with the training content and participants work nature.
- Assessment tests conducted at the end of the program to evaluate the achievement of training objectives.

Each participant receives the training material (both theoretical and practical) in printed form and saved on a CD or flash drive. Detailed reports, including attendance records, final results, and overall program evaluations, are also provided.

Training materials are prepared professionally by a team of experts and specialists in various fields. At the end of the program, participants are awarded a professional attendance certificate, signed and accredited by the Scandinavian Academy for Training Center.

#### **Program Timings:**

• 9:00 AM to 2:00 PM

## The program includes:

- A daily buffet provided during the sessions to ensure participants comfort.
- A closing ceremony on the final day to distribute certificates and celebrate participants achievements.