€TRAINING

CCTV System Programming

25 - 29 August 2024
Dubai (UAE)

Introduction

CCTV is the use of video cameras to send a signal to a specific location, on a limited set of screens. It differs from broadcast television in that the signal is not transmitted openly, although it may use P2P or P2P. "P2MP", wired network, or wireless connections, and although nearly all video cameras fit this definition, the term is often applied to those used for surveillance in areas that may need to be monitored such as banks, stores, and other areas that require security .

Surveillance using CCTV cameras is common in many regions around the world, and in recent years the use of body-worn video cameras has been introduced as a new form of surveillance.

In industrial facilities also, CCTV equipment can be used to monitor operational parts of a central control room, for example when the environment is not suitable for humans, CCTV systems may operate continuously or only as needed to monitor a specific event using DVRs and recording for potentially many years, with a variety of quality and performance options and additional features such as motion detection and email alerts.

Recently, decentralized IP cameras that may be equipped with megapixel sensors support recording directly to network-attached storage devices, or internal flash for completely independent operation, and there are about 350 million surveillance cameras around the world as of 2016 installed About 65% of these cameras are in Asia."Course Objectives

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At the end of this course the participants will be able to:

- Understand the basic concepts of surveillance cameras.
- Learn how to conduct a technical and engineering inspection.
- Study how to design networks for cameras.
- Identify all types of surveillance cameras internal, external, hidden, and mobile.
- Deal with the installation and installation of cameras indoor, outdoor, hidden, and mobile.

Targeted Audience

- Engineers or professionals and personnel involved in electrical work, wired and wireless networks.
- Computer engineers and engineers whose nature of work requires acquiring the necessary expertise in this field.
- Technical engineers and network workers.
- Workers in establishments whose nature of work requires acquiring the necessary expertise in this field.
- Anyone who wants to learn the installation, programming and maintenance of surveillance cameras.
- Anyone who finds himself in need of this course and wants to develop his skills and experience in this field.

Course Outline

Unit 1:

- General introduction to visual surveillance systems.

- Technical specifications of surveillance cameras.
- The basic components to work with in the system.
- Equipment needed to work with.

Unit 2:

- ### Initial preview.

- Schematic drawing of the visual monitoring system.
- system protection.
- Types of monitoring systems.
- Knowing and estimating the necessary distances to work with.
- Building internal and external monitoring networks.

Unit 3:

- Introduction to Recording Devices.
- Types of recording systems.
- Technical specifications of recording systems.
- How to connect it to cameras.
- Recordings and how to copy them elsewhere.
- Security precautions for recordings.

Unit 4:

- Surveillance Cameras.
- Types of surveillance cameras.
- Basic equipment for visual surveillance systems.
- Fixed camera installation method.
- Technical specifications of fixed cameras.
- How to install moving cameras.
- Technical specifications of moving cameras.

Unit 5:

- Intelligent systems.
- Programming external networks with smart systems.
- CCTV APPS
- Programming of network connection devices "ACCESS POINT & ROUTERS" for monitoring systems.
- How to distribute CCTV cameras.
- Display systems "PAL & NTSC".
- Multiple distribution mechanism for more than one screen.
- Audio preparation in recording systems.
- Preparing and installing motion detectors and alarms.
- Problems that may occur and how to avoid them.