€TRAINING

Fire Alarm Systems

4 - 8 November 2024
Kuala Lumpur (Malaysia)

Fire Alarm Systems

REF: S1625 DATE: 4 - 8 November 2024 Venue: Kuala Lumpur (Malaysia) - Fee: 5850 Euro

Introduction:

This training program provides participants with essential knowledge and skills to ensure compliance with codes and standards related to fire alarm systems. The program equips participants with the expertise needed to effectively design, install, and maintain fire alarm systems in accordance with industry best practices and legal requirements.

Program Objectives:

At the end of this program, participants will be able to:

- Describe the main types of smoke detectors and their working principle.

- Understand the working principle of the different types of heat detectors.

- Describe the function of the VESDA system.

- Know the typical loop architecture of smoke/ heat detectors.

- Describe different types of fire detectors and their principle of operation.

- Specify the appropriate type of fire detector for the service.

- Describe the purpose of Optical Integrity optional.

- Troubleshoot and identify problems with fire & gas monitoring systems.

- Describe the principle of operation of Hydrocarbon Gas Detectors.

Targeted Audience:

- Managers & Supervisors.

- Fire Systems personnel/end users and Fire Responders.

- System Design, Fire Protection and Loss Prevention Engineers.

- Safety Professionals working in Health, Safety and Environmental Protection.

- Instrument and electrical technicians and engineers.

Program Outlines:

Unit 1:

Introduction/ Selecting the Category of Protection and Coverage/ Detector Zones and Alarm Zones:

- Planning the system.
- The role of fire risk assessment and fire engineering BS 5839-1, NFPA 72.
- Type of system.
- Servicing arrangements - planning flowchart and category.
- The meaning of a detection zone and alarm zone.
- The purpose of detection zones, configuration guidelines, and detection zone safeguards.

Unit 2:

Which Type of Fire Detection and Alarm System/ Detector Suitability/ Detector Coverage:

- Conventional systems.
- Detection zones.
- Detectors and call points.
- Addressable systems - detectors and call points and digital addressable systems.
- Operation of analog addressable detectors.
- General fire system engineering principles - detector selection and types.

Unit 3:

Manual Break Glass Call Points/ Limitation of False Alarms/ Means of Giving Warning to Occupants:

- Siting of manual call points.
- Categories of false alarm and causes.
- Requirements for service technicians.
- Protection against electromagnetic interference.
- Performance monitoring of newly commissioned systems, system management, servicing, and maintenance.

- Audible alarms in noisy areas, alarm zones, and external fire alarm devices.

Unit 4:

Control and Indicating Equipment/ Power supplies/ Cabling Considerations:

- Siting of control and indicating equipment.

- Location of origin of the fire and Security of control equipment.

- Networked control panels, mains supply-standby supply; life protection and property protection.

- Calculation of standby battery capacity.

- Recommended cable types and mechanical protection of cables.

- Segregation.

Unit 5:

Communication with the Fire Service/ System Installation/ Maintenance:

- Automatic transmission of alarm signals and category.

- Methods of automatic transmission.

- Standards for alarm receiving centers and siting of equipment.

- Installation work, inspection, testing, commissioning, and handover.

- Routine testing.

- Servicing.