



## IE272: Maintenance of Fire and Gas Detection System Instrumentation

## Training Description:

This training course will cover Basic introduction, working principles, testing and maintenance procedures for Fire and Gas detection System. It includes:

- ❖ Introduction of fire alarm panel, it's working. Wiring & Loop diagram explained. Fire Alarm System testing procedure.
- ❖ Smoke detector & it's working. Smoke Detector maintenance & testing procedure.
- ❖ Heat detector & it's working. Heat Detector maintenance & testing procedure.
- ❖ What MCP & it's working. Typical application & actions. MCP testing procedure.
- ❖ Fire Suppression System working. Fire Suppression System Maintenance and testing Procedure.
- ❖ Fire & Gas detection system and its function. Types of signals, typical application and actions of sensors. System interfacing with HVAC, fire pumps and fire protection system.
- ❖ Deluge System introduction and working principle. Deluge System application. Deluge System operation. Deluge System inspection, testing & Maintenance Procedure.
- ❖ What is line monitoring. Why line monitoring is important.
- ❖ Flame Detector introduction & How it works. Types of Flame Detector. Flame Detector Maintenance & testing Procedure. Typical applications & actions.
- ❖ Point Gas Detector introduction & How it works. Why Point Gas Detector is used. Point Gas Detector Maintenance, testing and calibration Procedure. Typical applications & actions.
- ❖ Open Path Gas Detector introduction & their working principle. Open Path Gas Detector Maintenance Procedure. Typical applications & actions

## Training Objectives:

By the end of the training, participants will be able to:

- ✓ Maintenance of Building and Process Plant Fire and Gas System instrumentation.
- ✓ It includes introduction to Sensors, Detectors, Fire alarm panel and their maintenance Procedures.
- ✓ Fire suppression systems, Gas detectors, Sounders, Beacons and other Safety systems maintenance procedures.
- ✓ Maintenance checks on all the fire and gas monitoring and detection systems.

## Training Designed for:

This course is intended for Instrumentation Engineer, technician, supervisor, Fire alarm technician, and experienced professionals.

## Training Requirement:

“Hand’s on practical sessions, equipment and software will be applied during the course if required and as per the client’s request.”

This training course is available upon request in English or Arabic, virtual online live or face to face public/inhouse. Content, location and duration can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client’s learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

## Training Program:

### FIVE DAYS:

- ❖ Pre-Assessment
- ❖ Introduction
- ❖ HSEQ Precautions and Controls
- ❖ Occupational Health & Safety Risk and Control Measures
- ❖ Understanding Hazardous Area
- ❖ Basic Fire Alarm System
- ❖ Introduction to Building Fire alarm system
- ❖ Maintenance and testing of Smoke Detector
- ❖ Maintenance and testing of Heat detector
- ❖ Maintenance and testing of Manual Call Point MCP
- ❖ Maintenance and testing of INERGEN Fire Suppression System
- ❖ Process Plant Fire and Gas System
- ❖ Maintenance and testing of Deluge System
- ❖ Introduction to Line Monitoring
- ❖ Maintenance and testing of Flame Detector
- ❖ Maintenance and testing of Point Gas Detector
- ❖ Maintenance and testing of Open Path Gas Detector
- ❖ Course Conclusion
- ❖ Post-Assessment and Evaluation

## Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Software & General Discussions
- Pre and Post Test

## Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

## Training Fees:

**As per the course location** - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

## Training Timings:

### Daily Timings:

|               |                               |
|---------------|-------------------------------|
| 07:45 - 08:00 | Morning Coffee / Tea          |
| 08:00 - 10:00 | First Session                 |
| 10:00 - 10:20 | Recess (Coffee/Tea/Snacks)    |
| 10:20 - 12:20 | Second Session                |
| 12:20 - 13:00 | Recess (Prayer Break & Lunch) |
| 13:00 - 14:00 | Last Session                  |

**For training registrations or in-house enquiries, please contact:**

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Training & Career Development Department