Course Objectives :

Fire Fighting Systems Design course aims to teach engineers to investigate the causes of fires and provide fire protection method. The course covers all fire causes and both manual and automatic protection methods. During the course we will teach you how to search the code (NFPA) to get the correct design of the system. You will be a designer by the end of this course.

Outline:-

1 :-**(Introduction)**
-project Staff
-project steps
-Fire Triangle
- Fire Classes
- Fire Fighting Agents
-AutoCAD orders

2:- (Co_2 and Clean Agent System)
- Different Type of Gases
- Use and limitations
- Use and limitations
- Hazard to personal
- System Main Components
- System Operation
-example with using AutoCAD (practical project)

3:-(Water Based Systems)
-Main System Components
-Different System Configurations
- Fire Hose cabinet
-single line diagram
-example with using AutoCAD (practical project)

4:-(Wet Sprinkler System)
- Main System Components
- Hazard classifications
- Selection of Sprinklers
- Area Limitations
- Storage Water Calculations
-example with using AutoCAD (practical project)

5:- (Hydraulic Calculations)
Remote Area of Operation
Nodes and Pipes
Water Velocity in pipe and Pipe Diameters .
Elite Software
-example with using AutoCAD (practical project)
project)

6:- (pumps)
-pump types
-pump room
-pumps in the code
-Installation of pump
-example with using autocad (practical

7 :- (practical session)
Full Project

Notes:-

- **Courses are documented from the international codes & Standards.**
- **Presentations are provided with illustrative videos & pictures.**
- **Copy of codes catalogues project samples & other useful materials will be provided.**