



### About the Course

The course will present concepts and practical aspects of design, installation and maintenance of active and passive fire protection systems



This course provides key design techniques and practical application aspects related to fire and life safety engineering. It takes the learner through the design, installation and maintenance of active and passive fire protection systems which are typically installed in infrastructures. This advanced course provides the learner the experience of designing fire protection systems in line with design standards and statutory requirements. It is developed in a manner to provide information via real time case studies and design examples which will support the learner's understanding about the design of active fire protection systems. The course also includes description about the various passive fire protection systems that can be implemented into fire safety design to ensure a fire safe infrastructure or premise.



### Key Topics



## Course Objectives

Enables learner to:

- ▶ To provide students with an understanding of the principles of fire science, building codes, and standards related to fire and life safety in buildings.
- ▶ Associate the Basics of Fire, Active and Passive Fire protection Systems
- ▶ Classify the Need, Role and Aspect of Compartmentation in a Building
- ▶ Compare the Fire Alarm Integration with Building Systems
- ▶ List the Codes and Standards related to Aspiration Detection System
- ▶ Illustrate the Design of Water Spray systems

## Learning Outcomes

Enables learner to:

- ▶ Recall the various Codes & Standards related to fire protection and life safety
- ▶ List the Codes & Standards for Fire Brigade Apparatus - NBC, NFPA & IBC
- ▶ Define the concepts of Fire Protection in Buildings, Resistance Rating, and Restrictions
- ▶ Analyse and evaluate the effectiveness of fire and life safety systems in different building scenarios and identify areas for improvement.
- ▶ Evaluate the compliance of fire and life safety systems with relevant codes, standards, and regulations.
- ▶ Develop and present a comprehensive fire and life safety plan for a hypothetical building, including fire detection and suppression systems, emergency response planning, and building design considerations.