

Beyond the Cause and Origin: Engineering Analysis of Building Fire

Course Description

This two-day course will cover the role that Fire Protection Engineers (FPEs) play in the investigation and analysis of building fires. FPEs have the educational background and training to identify and address building and fire code issues that may have contributed to the ignition and/or development of a fire; they also have the education and training to analyze the dynamics of building fires as well as the expected and actual performance of different fire protection systems under fire conditions. This seminar addresses different types of engineering analyses related to building fires, including ignition, fire spread, fire detection, fire suppression, fire confinement and egress analysis. This seminar also addresses the legal context under which most fire investigations are conducted. A number of case studies are presented to demonstrate the engineering analysis of building fires.

Learning Objectives

- Understand the different roles for fire protection engineers in fire investigations;
- Follow the legal and regulatory context for fire investigations and experts;
- Recognize the role of building codes and fire safety standards in assessing standards of care for building design, construction, operation and maintenance;
- Appreciate how fire modeling and fire dynamics analysis can be used for fire scenario hypothesis testing;
- Define the general principles and performance for fire protection systems

Pre requisite

General understand of the principle of fire protection engineering. A working knowledge of building codes and fire safety standard is helpful, but not essential, to participate in this course

Who will benefit: Experience Level- Intermediate

Fire investigators, engineers, and others involved in the forensic analysis of fire who want to learn more about the engineering analysis of building fires.

Materials Needed

Course materials will be distributed on site; participants do not need to bring any materials with them.

Course assessment

Participants will be assessed via a written test upon completion of the course. A passing score of 70% will be required to obtain a Certificate of Completion.

Earn Valuable CEUs:

Participants will receive 14 PDHs or 1.4 CEUs. A Certificate of Attendance will be awarded.