Fire Safety Program - ME 672 Advanced Fire Dynamics

Course Objectives

This course briefly reviews the material covered in ME 671 and then introduces the student to advanced concepts related to all stages of compartment fire development, from ignition and early fire growth to the fully developed or post flashover fire. Related topics such as flame spread, design fire specification, rapid fire growth, ventilation and smoke control are also covered. Examples, case studies and class discussions are used to illustrate the applications and issues encountered with use of advanced fire dynamics principles for performance based building design and in other fire safety applications. Finally, students gain experience in the use of various computer fire modeling tools during their assignments and projects for the course.

Course Outline

- Ignition
- Materials Flammability
- Flame Spread
- Design Fires
- Room Fire Growth
- Fire Plumes
- Rapid Fire Growth
- Ventilation and Smoke Control

Recommended References


Contact Us

For information on Fire Safety Group courses, registration, and admissions:
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