

Fire Safety Program - ME 770 Fire Performance Testing

Course Objectives

This course introduces theoretical, practical and hands-on aspects of a variety of fire test methods. After outlining basic principles of experimental design and instrumentation for fire tests, specific fire performance test methods are examined, including those for HRR, ignition and flammability, fire resistance and flammability of textiles. In addition, a range of large-scale fire experiments and fire reconstructions are discussed as examples of how course principles are applied during realistic field tests of fire behaviour.

Participants are encouraged to bring their experiences and views to partake in class discussions throughout the course. The Friday Forum and other discussion periods will provide many opportunities for exchange of information on related topics.

Course Outline

- Introduction
- Experimental Design and Instrumentation
- Heat Release Rate Tests
- Ignition and Flammability Tests
- Fire Resistance Testing
- Applications to Life Safety
- Textile Tests
- Fire Experiments and Reconstructions
- Friday Forum

Recommended References

- Dougal Drysdale, "An Introduction to Fire Dynamics", Third edition, John Wiley and Sons, Toronto.
- Karlsson, B. and Quintiere, J., Enclosure Fire Dynamics, CRC Press, 1999.
- ASTM, NFPA, ULC and other test standards.
- Please see separate list for references on other specific topics

Contact Us

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

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