

**Seminar Title:** Hydraulics for Fire Protection

**Seminar Description:** Hydraulic calculations are the foundation for supplying water-based fire protection systems with the appropriate amount of water. This seminar covers the procedures for hydraulic calculations in accordance with NFPA 13. The equations, principles and process will be reviewed in detail including selecting a design method along with finding the remote area and calculating flows and pressures. This program can be advantageous to those responsible for performing the hydraulic calculations as well as those who review them.

**Total Instructional Time:** 8 Contact Hours

**Learning Outcomes:** At the conclusion of the seminar, the participant will be able to:

1. Explain and use hydraulic formulas
2. Describe the pressure types that apply to the hydraulic calculations
3. Identify and apply a design method from NFPA 13 for hydraulic calculations
4. Use a hydraulic calculation sheet
5. Evaluate a water supply for the system demand
6. Describe the friction loss for varieties of pipes
7. Describe the process of hydraulic calculations
8. Explain computer calculations input and output data

**Seminar Format(s):** Lecture, Discussion, Activities, Group Problem Solving, Individual Exercises

**Participant Materials:** Participant Guide.

**Assessment Method:** In-class participation, including practice exercises and calculations