

# Foam Fire Protection Engineering Seminar

One of a Kind Training from Foam Fire Protection Experts  
June 4-6, 2019



The National Foam Fire Protection Engineering Seminar is the only one of its kind conducted anywhere. As a participant, you will be among a select group of practicing engineers and technical personnel who will be able to earn a certificate of completion this year. For those with NICET (National Institute for Certification of Engineering Technicians) the submittal of your completion certificate will earn 24 continuing education points. The instruction is concentrated and intense, and class size is limited to 30 students. To take advantage of this opportunity and to avoid disappointment, reserve your place today.

## What You Will Learn

- Capability of foam agents, devices, and systems
- Proper engineering of foam fire protection systems
- Basic foam system hydraulic calculations
- Principles of foam proportioning and delivery systems
- Review of principal guides and standards related to foam system design
- Fixed, semi-fixed/portable/mobile foam systems, applications, and equipment
- Effective uses of foam systems in applications such as atmospheric flammable liquid tanks, aircraft hangars, loading racks, marine applications, and other hazard types

## Who Should Attend

- Foam system design and technical personnel from:
  - Architectural and engineering firms
  - Chemical companies
  - Petrochemical companies
  - Military services
  - Oil companies
  - Industrial firms using flammable liquids
  - Regulatory agencies
- Building officials and insurance inspectors who review foam systems
- Mechanical engineers, designers of fire protection systems, and fire protection consultants

**Class Schedule**

**Day 1 - (First Half) (Start Time 8:30AM at the Chester County Department of Emergency Services)**

- Welcome and Introductions (Start 8:30AM)
- Witness foam tests and equipment demos (weather permitting)
  - o UL, Foam Quality Measurement/ Expansion & Drainage, and Sample Catching
  - o Equipment Display and Hands-On Instruction
    - Bladder Tank
    - Proportioners
    - Hi Ex Generator
    - Ratio Controllers
    - Foam Skid
    - Line Proportioners
    - Foam Chambers
- Laboratory Demonstrations
  - o AR vs Non AR Foams (Laboratory)
  - o Film Formation (Laboratory)
  - o Wetting (Laboratory)

**Day 1 - (Second Half)**

- Lunch at 12PM(Lunch is Provided)
  - Fundamentals of foam agents, including environmental concerns
  - Foam testing comparisons and considerations
  - Module #1 Flammable Liquid Fuels & Foam Concentrates
    - o Module 1A Flammable Liquid Fuels
    - o Module 1B Basics of Foam
    - o Module 1C Foam Agents Listing & Approvals
    - o Module 1D Environmental Issues
  - Module #2 Foam Equipment & Design Overview
  - Welcome Dinner
- \*\*Please RSVP to [hank.shaefer@nationalfoam.com](mailto:hank.shaefer@nationalfoam.com) if you will be attending\*\***

**Day 2 - (Start Time 8AM unless otherwise instructed)**

- Start 8:00AM
- Module #3 Foam Proportioning Systems
  - o Foam Percent Measurement (Proposals Station)
    - Conductivity
    - Refract
    - Curve Development
- Lunch at Noon (Lunch is Provided-delivered at 11:30-11:45AM)
- Module #4 NFPA 11 Related Systems (Start Time 1PM)
  - o Module 4A Storage Tank Systems
  - o Module 4B High Expansion Systems
  - o Module 4C "Big Flow" Systems
- Module #7 How to Request Proposals
- Module #8 Systems Testing

**Day 3 - (Start Time 8AM unless otherwise instructed)**

- Start 8:00AM
  - Module #5 NFPA 16 Related Systems
    - o Module 5A Foam Water Sprinkler Systems
    - o Module 5B Foam System Hydraulics
    - o Module 5C Loading Rack Foam Systems
  - Lunch at Noon (Lunch is Provided)
  - Module #6 NFPA 409 Related Systems - (Start Time 1PM)
  - Questions and Answers
  - Handout Certificates
- For further information regarding the class curriculum, please contact Bruce Shipley, Training Manager at (610) 431-8635.

**Note:**

Class agenda is subject to change due to weather or class size.

**What Attendees Receive**

- National Foam Engineering Manual
- Current NFPA Standards #11, #16, #409, and #25
- Presentation manual
- Certificate of Completion
- 4 GB Flash Drive

**Location and Hotel**

The Engineering Seminar will be conducted at the following location:

- Chester County Department of Emergency Services  
137 Modena Road  
Coatesville, PA 19320

Attendees are responsible for securing their own travel arrangements, including hotel and transportation.

The Courtyard by Marriott is offering seminar attendees accommodations at a rate of \$129.00 per night plus tax. All rooms include free wireless high speed internet. Call and mention "National Foam" for corporate pricing when making the reservation.

**Courtyard by Marriott**

600 Manor Road  
Coatesville, PA 19320  
(610) 380-8700

Note: For NF room rate, call for reservations.

**To Register**

Please complete the registration form on the next page and forward it to National Foam, Inc.



**Foam Fire Protection Engineering Seminar  
June 4-6, 2019**



**Registration Form**

Please enroll me in National Foam's Fire Protection Engineering Seminar.

Enclosed is payment for \$695.00 (U.S. funds) to cover tuition and all materials and textbooks as described in the seminar announcement. I understand that all other expenses, including those related to travel, lodging, and food are my responsibility. Registration must be received no less than 30 days prior to scheduled seminar date.

**Student Information**

|   |             |         |
|---|-------------|---------|
| NAME (as you would like it to appear on your course completion certificate)   |             |         |
| COMPANY   |             | TITLE   |
| ADDRESS   |             | CITY    |
| STATE/PROVINCE  | POSTAL CODE | COUNTRY |
| PHONE   | FAX         | EMAIL   |
| LANGUAGE PREFERENCE FOR CLASS MATERIALS<br><input type="checkbox"/> English <input type="checkbox"/> Spanish  |             |         |
| DIETARY LIMITATIONS<br><input type="checkbox"/> No Beef <input type="checkbox"/> Vegetarian <input type="checkbox"/> Gluten Free                      Other _____ |             |         |

**Payment Information**

|  |                             |                 |
|--|-----------------------------|-----------------|
| MODE OF PAYMENT<br><input type="checkbox"/> Check* <input type="checkbox"/> Visa <input type="checkbox"/> MasterCard <input type="checkbox"/> Discover <input type="checkbox"/> American Express |                             |                 |
| CREDIT CARD NUMBER   | SECURITY CODE               | EXPIRATION DATE |
| CARD HOLDER'S NAME   | CREDIT CARD BILLING ADDRESS |                 |
| CITY   | STATE/PROVINCE              | POSTAL CODE     |
| COUNTRY  | SIGNATURE                   |                 |
| PHONE  |                             |                 |

\*Please make check payable to National Foam, Inc.

**Mail, email or fax Registration Form with tuition payment to:**

|   |  |
|---|--|
| <b>Mail:</b><br>National Foam, Inc.<br>Attention: Heather Rudder<br>141 Junny Road<br>Angier, NC 27501<br>Phone: 919-331-6100<br>Email: Heather.Rudder@nationalfoam.com | <b>Fax:</b><br>919-639-2257<br>Attention: Heather Rudder |
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