

Completers should be able to conduct an incident size-up using the North American Emergency Response Guide, use personal protective equipment and conduct a decontamination procedure. Completers should be prepared to certify at both the Hazardous Materials Awareness and Operations levels.

**FSF 1350**  
**Mathematics for the Fire Service**  
**3:3:0 On Sufficient Demand**

For those seeking the Associate of Applied Science degree. Introduces basic mathematical operations, including fractions, decimals, percentages, measurements, statistics, graphs, formulas and equations. Completers should be able to apply mathematical skills in solving basic fire service problems.

**FSF 2910**  
**Basic Firefighter Internship**  
**3:0:15 Su, F, Sp**

•Prerequisite(s): FSF 1330, FSF 1340, Instructor's recommendation and internship coordinator's approval.

For students who have completed the Recruit Candidate Academy courses and desire an opportunity to apply the knowledge, skills, and abilities learned in a realistic environment. Student interns will experience the fire service as a fully integrated member of a fire company in a career fire department. Additionally, the internship will emphasize the student's work ethic, attitude, and ability to adapt to highly stressful and sometimes dangerous situations.

**FSH—FIRE SCIENCE - HAZARDOUS MATERIALS**

**FSH 2410**  
**Hazardous Materials Technician Fundamentals**  
**3:3:0 On Sufficient Demand**

•Prerequisite(s): FSF 1340  
 Teaches the knowledge requirements of NFPA 471, 472, and CFR 1910.120 regulation for a Hazardous Materials Technician. Includes emergency response plans, classification of materials, ICS roles, personnel protective equipment needs, masks, containment and confinement concepts, decon requirements, termination concepts, toxicological and chemical terms and definitions.

**FSH 2420**  
**Hazardous Materials Technician Skills**  
**2:0:6 On Sufficient Demand**

•Prerequisite(s): FSH 2410  
 Presents the manipulative skill requirements of NFPA 471, 472, and CFR 1910.120 regulation for a Hazardous Materials Technician. Teaches handling simulated incidents, classifying materials, performing in ICS roles, using personnel protective equipment, containment and confinement

operations, setting up and operating decon, diking, plugging, and patching operations.

**FSH 2440**  
**Hazardous Materials Chemistry**  
**3:2:3 On Sufficient Demand**

Presents in-depth chemical information for hazardous materials responders. Teaches basic knowledge of how to evaluate potential hazards and behaviors of hazardous materials. Provides the underlying reasons for chemical reactions of hazardous materials. Includes decision-making abilities, safe operations, and handling.

**FSO—FIRE SCIENCE - OFFICER**

**FSO 2020**  
**Incident Command**  
**3:3:0 F, Sp**

Presents the basic principles of managing an emergency scene through the utilization of an incident command system for simple single unit, to complex multi unit response. Requires use of personnel, equipment, and additional resources to manage an incident by completing a size-up, analyze, develop and implement an action plan, maintain on scene accountability of personnel and resources by following IMS principles. Meets the incident command requirements for Fire Officer I, Fire Officer II, NFPA 1021, Presidential Directive #5, and NIMS compliance.

**FSO 2030**  
**Fire Inspector I**  
**3:3:0 F, Sp**

For Fire Science and Building Inspection Technology students. Addresses the principles of fire inspection and application of the International Fire Code. Topics include identification of fire hazards, fire prevention measures, inspection techniques, and pre-fire planning. Includes classroom discussion and actual inspections of both under-construction and occupied buildings. Successful completers should be prepared to attain Fire Inspector I certification.

**FSO 2050**  
**Fire Protection and Detection Systems**  
**3:3:0 F, Sp**

Teaches students to become familiar with the various types of fire protection and detection systems. Explains how each type of system functions, where such systems are required by code and how the various systems are serviced and maintained.

**FSO 2060**  
**Fire Service Management and Administration**  
**3:3:0 F, Sp**

Addresses the administrative skills and abilities required for Fire Officer II

certification. Includes occupational health and safety concepts, injury prevention, risk management, application of departmental policies and procedures, preparation of budget requests, preparation of news releases, and preparation and maintenance of departmental records and reports.

**FSO 2080**  
**Building Construction for the Fire Services**  
**3:3:0 F, Sp**

For second year Fire Science students. Explores components of building construction that relate to fire and life safety. Explains construction and design factors to be considered during fire inspections, pre-fire planning and fire fighting operations. Emphasis is placed on firefighter safety.

**FSO 2090**  
**Fire Officer I**  
**3:3:0 F, Sp**

For second year Fire Science students and experienced firefighters. Addresses the NFPA requirements for Fire Officer I. Discusses human resource management, community and government relations, application of fire department policies, fire investigation procedures, emergency service delivery and safety considerations. Completers should be prepared to certify as Fire Officer I.

**FSO 2100**  
**Fire Supervision and Leadership**  
**3:3:0 F, Sp**

Designed to bring together basic principles of effective supervision. Includes up-to-date findings from behavioral research practical guidelines for improving supervisory and leadership skills, and applying effective supervisory practices on the job.

**FSO 2110**  
**Fire Instructor I and II**  
**3:3:0 F, Sp**

Teaches the NFPA 1041 requirements for Instructor I and II. Includes job factors that influence teaching, developing behavior objectives and lesson plans, organizing the learning environment, methods of instruction, training aids, and principles of testing and evaluations. Lab activities include classroom presentations, preparing audio visuals, and developing objectives.

**FSO 211A**  
**Fire Service Instructor I**  
**1:1:0 F, Sp**

For second year Fire Science students. Addresses the knowledge and skills required to deliver a training lesson from a prepared outline and instructor's guide. Includes psychology of learning, instructional techniques, instructional media, evaluation techniques, and legal considerations. Completers should be prepared to instruct a fire service audience and certify as Fire Service Instructor I.

FSF

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