

# FIRE SCIENCE & SAFETY (FSS)

---

All FSS courses numbered 100 and above may be applied to the major field and elective requirement for the Associate in Arts and Associate in Science degrees.

## **FSS 101 Principles of Emergency Services (3) 3,0**

This course provides an overview to fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics; life safety initiatives. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$414 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** None

**Semester(s) Offered:** Fall and Spring

## **FSS 102 Fire Prevention (3) 3,0**

This course provides fundamental knowledge relative to the field of fire prevention. Topics include history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use and application of codes and standards, plans review, fire inspections, fire and safety education, and fire investigation. (1.2) Proficiency Credit Available (2ERI) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$414 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** None

**Semester(s) Offered:** Fall and Spring

## **FSS 103 Bldg Const. for Fire Prevention (3) 3,0**

This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. (1.2) Proficiency Credit Available (2 ERI) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$414 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Grade of C or better FSS 101 or consent of instructor

**Semester(s) Offered:** Spring

## **FSS 105 Principles of Emerg. Serv. Admin. I (3) 3,0**

This course introduces students to the organization and management of a fire and emergency services department and the relationship of governmental agencies to the fire service. Emphasis is placed on fire and emergency service ethics and leadership from the perspective of the company officer. (1.2) Proficiency Credit Available (2 ERI) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$414 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Grade of C or better in FSS 101 or consent of instructor.

**Semester(s) Offered:** Varies

## **FSS 106 Principles of Emerg. Serv. Admin. II (3) 3,0**

One of two management courses required of eligible candidates pursuing Illinois certification as a Fire Officer I. Acquaints the student with the principles of communication and group dynamics as they relate to the company officer. (1.2) Proficiency Credit Available (2 ERI) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$414 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Grade of C or better in FSS 105 or consent of instructor

**Semester(s) Offered:** Varies

## **FSS 110 Basic Operation Firefighter Module A (4) 3.5,1**

This course provides partial training toward Basic Operations Firefighter Certification by the Office of the State Fire Marshal. Topics discussed include orientation/organization, fire behavior, building construction, safety, communication, self-contained breathing apparatus (SCBA), ladders, extinguisher training, and ropes and knots. This Course is approved by the Office of the State Fire Marshall (OSFM) and completion of this course qualifies students for the State Fire Marshal Certification Test Module A. (1.2) Proficiency Credit Available (3 IER) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$802 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Admission into the Basic Operation Firefighter program or consent of program director

**Semester(s) Offered:** Fall, Spring and Summer

**FSS 111 Basic Operation Firefighter Module B (4) 3.5,1**

This course is the continuation of FSS 110. This course provides partial training toward Basic Operations Firefighter Certification by the Office of the State Fire Marshal. Topics discussed include, Search and Rescue, Installed Systems, Salvage and Overhaul (Loss Control), Ventilation, Water Supply, Fire Hose, Appliances, Nozzles and Fire Streams, and Fire Control This Course is approved by the Office of the State Fire Marshall (OSFM) and completion qualifies students for the State Fire Marshal Certification Test Module B.(1.2) Proficiency Credit Available (2 RIE) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$802 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Grade of C or better in FSS 110

**Semester(s) Offered:** Fall, Spring and Summer

**FSS 112 Basic Operation Firefighter Module C (4) 3.5,1**

This course is a continuation of FSS 110 and FSS 111. This course provides partial training toward Basic Operations Firefighter Certification by the Office of the Illinois State Fire Marshal. Topics discussed include signs and symptoms of mental illness, mental health and resiliency, CPR, Basic First Aid. Additionally, this course provides an overview of the Courage to be Safe course and the National Incident Management System 100 and 700 courses. NIMS 100, 200, 700, 800, Courage to Be Safe, Traffic Incident Management, Decontamination Procedures, Fire Company Operations. This Course is approved by the Office of the State Fire Marshall (OSFM) and completion of this course qualifies students for the State Fire Marshal Certification Test (1.2) Proficiency Credit Available (2 RIE) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$802 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Grade of C or better in FSS 111

**Semester(s) Offered:** Fall, Spring and Summer

**FSS 113 Vehicle Operator/Rescue Awareness (1) 1,0**

Technical Rescue Awareness is designed to give first due companies a basic awareness of requirements and hazards at technical rescue incidents. Training will meet standards of NFPA 1670. Professional qualifications require completion of the approved Technical Rescue Awareness course. Technical Rescue Awareness is designed as the introductory step in the acquisition of knowledge and skills required for first due company operations. Fire Service Vehicle Operator is designed to give fire service personnel the basic knowledge and skills to safely perform fire service vehicle operations as defined by NFPA 1451. Students must be employed by a fire department with appropriate sponsorship, insurance coverage, and an Illinois State Driver's License, Engaged in firefighting in an organized Illinois fire department as a fire protection person according to the Act, as attested to by the employing Fire Chief of the individual seeking certification. This Course is approved by the Office of the State Fire Marshall (OSFM) and completion qualifies students for the State Fire Marshal Certification Tests for Fire Service Vehicle Operator and Technical Rescue Awareness. (1.2) Proficiency Credit Available (2 RM) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$188 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Consent of program director

**Semester(s) Offered:** Fall and Spring

**FSS 115 Emergency Medical Responder (3) 3,0**

This course prepares students to provide emergency pre hospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. Areas of study include an introduction to emergency medical services systems, roles and responsibilities of EMRs, anatomy and physiology, medical emergencies, trauma, and special considerations for working in the pre hospital setting. (1.2) Proficiency Credit Available (F) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$414 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** None

**Semester(s) Offered:** Fall, Spring and Summer

**FSS 201 Fire Fighting Strategy & Tactics (3) 3,0**

This course provides the principles of fire ground control through utilization of personnel, equipment, and extinguishing agents. (1.2) Proficiency Credit Available (2 RIE) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$414 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Prerequisite:Grade of C or better in FSS 101 or consent of instructor

**Semester(s) Offered:** Fall and Spring

**FSS 202 Hazardous Materials Chemistry (3) 3,0**

This course provides basic chemistry relative to the categories of hazardous materials, including recognition, identification, reactivity, and health hazards encountered by emergency services. (1.2) Proficiency Credit Available (2 ERI) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$464 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** None.

**Semester(s) Offered:** Fall and Spring

**FSS 203 Protect. Hydraulics & Water Supply (3) 3,0**

This course provides a foundation of theoretical knowledge to understand the principles of using water in fire protection and to apply hydraulic principles to analyze and solve water supply problems. (1.2) Proficiency Credit Available (2 ERI) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$414 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Grade of C or better in FSS 103 or consent of instructor

**Semester(s) Offered:** Fall and Spring

**FSS 204 Fire Protection Systems (3) 3,0**

A study of the required standards for water supplies: protection systems; automatic sprinklers and extinguishing systems including analysis of various automatic signaling and detection systems. (1.2) Proficiency Credit Available (3 LETSIR) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$439 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Grade of C or better in FSS 101 or consent of instructor.

**Semester(s) Offered:** Fall and Spring

**FSS 214 Fire Service Instructor-Basic Level (3) 3,0**

This course is designed to meet the guidelines of the Illinois Fire Protection Personnel Standards and Education Commission to qualify fire service personnel to conduct training and education classes for others in the field. It is designed to teach the fire officer how to be more proficient in his or her work and how to use the resources that are available to him/her. Also how to utilize outlines, prepare classes, utilize tests, as well as participate in practice teaching where he/she can be evaluated. (1.2) Proficiency Credit Available (3 LETSIR) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$439 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Grade of C or better in FSS 204 or consent of instructor.

**Semester(s) Offered:** Fall and Spring

**FSS 215 Emergency Med Technician-Basic (8) 7,3**

In this course, students develop patient assessment skills and emergency treatment procedures. Medical emergencies covered include cardiac, resuscitation, and treating existing medical conditions such as diabetes, epilepsy, and emergency childbirth. Attention is given to treating and transporting traumatically injured patients; the course also involves extensive practical application of all treatment modalities. Special Note: The Illinois Department of Public Health and the Joint Commission on Accreditation for Hospitals require all students to pass a drug test and a criminal background check prior to participating in direct patient care as part of their educational program. (1.2) Proficiency Credit Available (3 LETSIR) Pass/No Credit Not Available

**Fire Science (FSS) program**

All students taking FSS 215 are required to pass a drug test and a criminal background check. .

**In-District Tuition/Fees:** \$1229 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Grade of C or better in FSS 115; or consent of program director.

**Semester(s) Offered:** Fall, Spring and Summer

**FSS 220 Legal Aspects of Emergency Services (3) 3,0**

This course addresses the federal, state, and local laws that regulate emergency services and reviews national standards, regulations, and consensus standards.. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$454 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Grade of C or better in FSS 101 or consent of instructor

**Semester(s) Offered:** Fall and Spring

**FSS 224 Fire Service Instructor - Level II (3) 2,1**

This course includes instruction in curriculum planning and advanced teaching principles. The course includes all objectives identified by the Office of the State Fire Marshal for certification at the Fire Service Instructor II Level. Student must be engaged in firefighting and a member of an organized Illinois fire department or Fire Brigade. This Course is approved by the Office of the State Fire Marshall (OSFM) and completion qualifies students for the State Fire Marshal Certification Test for Fire Service Instructor II. (1.2) Proficiency Credit Available (2 LTRSEIM) Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$439 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Grade of C or better in FSS 214

**Semester(s) Offered:** Fall and Spring

**FSS 276 Fire Behavior & Combustion (3) 3,0**

This course explores the theories and fundamentals of how and why fires start, spread, and are controlled. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$414 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Prerequisite:None

**Semester(s) Offered:** Fall and Spring

**FSS 278 Emergency Services Safety & Health (3) 3,0**

This course introduces the basic concepts of health and safety relative to emergency service organizations. Topics include risk and hazard evaluation and control procedures for emergency service organizations.(1.2) Proficiency Credit Available Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$414 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** None

**Semester(s) Offered:** Fall and Spring

**FSS 281 Fire Safety & Survival Principles (3) 3,0**

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavioral change throughout the emergency services.(1.2) Proficiency Credit Not Available Pass/No Credit Not Available.

**In-District Tuition/Fees:** \$414 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** None

**Semester(s) Offered:** Fall and Spring

**FSS 283 Fire Investigation I (3) 3,0**

This course is intended to provide students with the fundamentals for proper fire scene interpretations including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the fire setter, and types of fire causes. (1.2) Proficiency Credit Not Available Pass/No Credit Available.

**In-District Tuition/Fees:** \$414 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Grade of C or better in FSS 101, FSS 103, and FSS 276; or consent of instructor.

**Semester(s) Offered:** Fall and Spring

**FSS 284 Fire Investigation II (3) 3,0**

This course is intended to provide students with advanced technical knowledge on the rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation, and courtroom testimony.(1.2) Proficiency Credit Not Available Pass/No Credit Available.

**In-District Tuition/Fees:** \$414 (effective 2025/26 academic year)

**In-district tuition rates are subject to change based on Board approval.**

**Prerequisite:** Grade of C or better in FSS 283.

**Semester(s) Offered:** Fall and Spring