

# FIRE SCI MGMT/FIRE SERV OP (FIREMGT)

## Fire Sci Mgmt/Fire Serv Op (FIREMGT) 101

### Principles of Emergency Services

This course provides an overview of fire protection and emergency services; culture and history of fire science and emergency services, fire loss analysis, organizations of public and private fire protection services, and fire departments as part of local government. This foundation course includes introduction to fire protection, safety, tactics and safety. Writing assignments, as appropriate to the discipline, are part of the course.

*Eligibility for ENGLISH 101 based on prior coursework or appropriate score on Placement Test; or Consent of Department Chair*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

## Fire Sci Mgmt/Fire Serv Op (FIREMGT) 102

### Strategies and Tactics I

This course provides the principles of fire ground control through utilization of personnel, equipment, and extinguishing agents. Basic procedures for suppression of fire; application to principles of building construction of human resources and equipment. This course will meet requirements of the Illinois Fire Protection Personnel Standards and Education Commission for Strategy and Tactics I. Writing assignments, as appropriate to the discipline, are part of the course.

*Eligibility for ENGLISH 101 based on prior coursework or appropriate score on Placement Test; or Consent of Department Chair*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

## Fire Sci Mgmt/Fire Serv Op (FIREMGT) 103

### Fire Behavior and Combustion

History of fire sciences; theories and fundamentals of fire behaviors including how and why fires start, spread and are controlled. Writing assignments, as appropriate to the discipline, are part of the course.

*Eligibility for ENGLISH 101 based on prior coursework or appropriate score on Placement Test; or Consent of Department Chair*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

## Fire Sci Mgmt/Fire Serv Op (FIREMGT) 104

### Occupational Safety & Health for Emergency Services

This course introduces the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk and hazard evaluation and control procedures for emergency service organizations. Writing assignments, as appropriate to the discipline, are part of the course.

*Eligibility for ENGLISH 101 based on prior coursework or appropriate score on Placement Test; or Consent of Department Chair*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

## Fire Sci Mgmt/Fire Serv Op (FIREMGT) 106

### Fire Apparatus and Equipment Operator

Basic principles of fire apparatus construction, operation, and maintenance; consideration of pumps, pumper procedures and tests, aerial ladders and platforms, elementary hydraulic calculations. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in FIREMGT 101, or FIREMGT 102, or FIREMGT 103, or consent of Program Coordinator.*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

## Fire Sci Mgmt/Fire Serv Op (FIREMGT) 111

### Basic Incident Command

The Incident Command System provides a management framework for dealing with emergency situations. This course will provide the basic knowledge of what incident command is and how it functions, as well as the importance of having a strong central authority to oversee all aspects of responding to emergency situations. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in FIREMGT 101, or FIREMGT 102, or FIREMGT 103, or consent of Program Coordinator.*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

## Fire Sci Mgmt/Fire Serv Op (FIREMGT) 197

### Principles of Emergency Responder Safety and Survival

This course is designed to help students to identify and explain the sixteen life safety initiatives and explain the concepts of risk management and mitigation as it pertains to emergency services. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in FIREMGT 101, 102, 103 or 104 or Consent of Program Coordinator.*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

## Fire Sci Mgmt/Fire Serv Op (FIREMGT) 198

### Strategies and Tactics II

Subject areas include strategic concepts in fire fighting, duties and responsibilities of command officers, incident command system (scene, manpower, apparatus, and Rapid Intervention Teams (RIT) management, multi-company operations, disasters, high-rise operations, critical incident stress, and tactical exercises. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in FIREMGT 102 or Consent of Program Coordinator*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

## Fire Sci Mgmt/Fire Serv Op (FIREMGT) 200

### Management and Leadership I

This course is designed to provide information and skills required to act in primary supervisory role with a focus on leadership in fire service.

Topics covered include basic management principles and concepts, leadership styles and conflict resolution. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in or concurrent enrollment in FIREMGT 101, 102, or 103 or admission to the Fire Officer Training Program; or Consent of Program Coordinator.*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

## Fire Sci Mgmt/Fire Serv Op (FIREMGT) 201

### Fire Service Hydraulics

This course provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in FIREMGT 101, or FIREMGT 102, or FIREMGT 103, or consent of Program Coordinator.*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

**Fire Sci Mgmt/Fire Serv Op (FIREMGT) 202**

**Building Construction for Fire Science**

This course focuses on the study of the components of building construction related to firefighting, fire resistance and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, pre-planning fire operations, and operating at emergencies. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in FIREMGT 101, or FIREMGT 102, or FIREMGT 103, or consent of Program Coordinator.*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

**Fire Sci Mgmt/Fire Serv Op (FIREMGT) 203**

**Fire Suppression and Protection Systems**

This course provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in FIREMGT 101, or FIREMGT 102, or FIREMGT 103, or consent of Program Coordinator.*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

**Fire Sci Mgmt/Fire Serv Op (FIREMGT) 204**

**Management and Leadership II**

This course focuses on the role and responsibility of a fire officer who may be in charge of a single company or station. The course provides information on leadership styles, communication, group dynamics, coaching and counseling and performance appraisal. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in FIREMGT 200 or Consent of Program Coordinator.*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

**Fire Sci Mgmt/Fire Serv Op (FIREMGT) 205**

**Chemistry of Hazardous Materials**

This course provides basic chemistry relating to the categories of hazardous materials including recognition, identification, reactivity, and health hazards encountered by emergency services. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in FIREMGT 101, or FIREMGT 102, or FIREMGT 103, or consent of Program Coordinator.*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

**Fire Sci Mgmt/Fire Serv Op (FIREMGT) 206**

**Management and Operations III**

This course is the third in a four-part sequence focusing on the roles and responsibilities of a department fire officer, cultivating leadership styles and advanced management skills. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in FIREMGT 204 or Consent of Program Coordinator.*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

**Fire Sci Mgmt/Fire Serv Op (FIREMGT) 207**

**HAZWOPER**

This course is designed to enable workers to operate safely at work sites where hazardous materials are being used, spilled or released. It complies with extensive OSHA regulations and training standards as set forth in federal code 29 CFR 1910.120, which is intended to ensure worker and responder safety. Students will be trained to respond in a defensive fashion for the purpose of protecting people in the immediate area, property and the environment, without actually trying to stop the release. Students will be taught how to contain the release from a safe distance, how to keep it from spreading, and prevent exposures. Some of the skills to be taught include the use of monitoring and detection equipment, filter respirators, self-contained breathing apparatus (SCBA), the donning and doffing of chemical protection suits, and the setup and operation of a decontamination corridor. Writing assignments, as appropriate to the discipline, are part of the course.

*Eligibility for ENG 101 based on prior coursework or CCCRTW, ACT, SAT, GED, or HiSET test scores and a grade of C or better in any: FIREMGT 101, FIREMGT 102, FIREMGT 103, FIREMGT 104, EMT 101, or higher EMT class, or Consent of Program Director.*

1 Laboratory hours. 2.5 Lecture hours. 3 Credit Hours.

**Offered At:** MX

**Fire Sci Mgmt/Fire Serv Op (FIREMGT) 210**

**Principles of Fire Prevention**

This course provides fundamental knowledge relating 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 life safety education; and fire investigation. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in FIREMGT 101, or FIREMGT 102, or FIREMGT 103, or consent of Program Coordinator.*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

**Fire Sci Mgmt/Fire Serv Op (FIREMGT) 211**

**Management Operations IV**

This course is the fourth in a four-part sequence focusing on the roles and responsibilities of a department fire officer, cultivating leadership styles and advanced management skills. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in FIREMGT 206 or Consent of Program Coordinator.*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

**Fire Sci Mgmt/Fire Serv Op (FIREMGT) 212**

**Fire Investigation I**

This course is intended to provide the student with the fundamentals and technical knowledge needed for proper fire science 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. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in FIREMGT 101, or FIREMGT 102, or FIREMGT 103, or consent of Program Coordinator.*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

**Fire Sci Mgmt/Fire Serv Op (FIREMGT) 213**

**Fire Investigation II**

This course is intended to provide the student with advanced technical knowledge on the rule of the law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation and courtroom testimony. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in FIREMGT 212 Fire Investigation I or consent of Program Coordinator.*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

**Fire Sci Mgmt/Fire Serv Op (FIREMGT) 220**

**Fire Instructor I**

Methods and techniques of teaching for fire service instructors; principles of adult learning; teaching methodology; student assessment and evaluation. Writing assignments, as appropriate to the discipline, are part of the course.

*Grade of C or better in FIREMGT 101, or FIREMGT 102, or FIREMGT 103, or consent of Program Coordinator.*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX

**Fire Sci Mgmt/Fire Serv Op (FIREMGT) 221**

**Fire Instructor II**

Methods and techniques for Fire Service Instructor II training will examine methods and techniques for planning, development, and conducting a Fire Service Training Program. This course is designed for leaders in the emergency services field who desire to analyze, design, implement and evaluate training methods and techniques. Writing assignments, as appropriate to the discipline, are part of the course. This course will meet requirements of the Illinois Fire Protection Personnel Standards and Education Commission for the Standard Level II Instructor Certificate.

*Grade of C or better in FIREMGT 220 or Consent of Program Coordinator*

3 Lecture hours. 3 Credit Hours.

**Offered At:** MX