

FIRE SERVICE MANAGEMENT (FSMT)

Fire Service Management Undergraduate Courses

FSMT 1600 FUNDAMENTALS OF FIRE SCIENCE (3 credits)

Fundamentals of Fire Science is an applied science which focuses on basic understanding of the chemical and physical nature of fire. Students will learn about common fire hazards, extinguishing agent properties, as well as fire ignition and growth phenomena.

Distribution: Natural/Physical Science General Education course

FSMT 2200 CODES AND INSPECTIONS (3 credits)

Fire protection requirements, including zoning laws and primary access routes for flammable and explosive materials will be discussed. Major considerations and rationales employed in the formulation and creation of zoning and building codes are examined and exploration and understanding of local, state and national codes are also introduced. Safety education program development and implementation, fire inspection techniques and fire investigation procedures are additionally covered.

Prerequisite(s): EMGT 1000 or concurrent.

FSMT 2300 FIRE INVESTIGATION (3 credits)

The origin and cause of fire and explosion incidents will be explored. Fire and arson investigation procedures such as on-site investigations and inspections, documentation, and fact gathering, collection of witness statements and canvassing, and procedures for gathering and storage of critical evidence will be presented. Legal and jurisdictional issues affecting fire investigation will also be discussed.

Prerequisite(s): EMGT 1000 or concurrent

FSMT 2310 FIRE PROTECTION SYSTEMS (3 credits)

A study of the procedures necessary to evaluate the firefighting requirements and how these needs drive the design and utilization of various types of fire protection equipment, including design of structural protection systems and associated construction materials, fire detection technology and fire suppression systems.

Prerequisite(s): EMGT 1000 or concurrent

FSMT 2410 STRATEGIES AND TACTICS IN FIRE AND EMERGENCY SERVICES (3 credits)

This course will provide examples of strategic and tactical considerations that members of the emergency services can employ during structure fires to include residential, commercial, high-rise, special hazard structures, and other types of emergencies like hazardous materials incidents, mass casualty emergencies, and technical rescues.

Prerequisite(s): EMGT 1000

FSMT 2510 BUILDING CONSTRUCTION FOR THE FIRE SERVICE (3 credits)

The visible and hidden dangers inherently involved with fighting structural fires are examined in this course. Characteristics of construction materials, construction types, fire protection systems, smoke development, fire containment, high rise construction and many other topics relevant to firefighter life safety as related to building construction issues will be studied and evaluated.

Prerequisite(s): EMGT 1000 or concurrent.

FSMT 3020 FIRE DYNAMICS (3 credits)

This course examines the underlying principles involved in structural fire protection systems, building furnishings, and fire protection systems including water-based fire suppression systems, fire alarm and detection systems, special hazard suppression systems, and smoke management systems.

Prerequisite(s): Students must have completed FSMT 1600.

FSMT 3140 FIRE RELATED HUMAN BEHAVIOR (3 credits)

The goal of Fire Related Human Behavior is to provide students with knowledge about how humans respond to fire and how that knowledge has been integrated into life safety systems design and development.

Prerequisite(s): FSMT 2200

FSMT 3350 FIRE PREVENTION, ORGANIZATION, AND MANAGEMENT (3 credits)

This course examines the factors that shape fire risk and the tools for fire prevention, including risk reduction education, codes and standards, inspection and plans review, fire investigation, research, master planning, various types of influences, and strategies.

Prerequisite(s): FSMT 2200

FSMT 3680 ANALYTICAL APPROACHES TO PUBLIC FIRE PROTECTION (3 credits)

This course examines rational decision making tools and techniques that can be used in Fire and Emergency Services agencies, including data collection, statistics, probability, decision analysis, utility modeling, resource allocation, and cost-benefit analysis.

Prerequisite(s): FSMT 2200.

FSMT 4300 ADVANCED PRINCIPLES OF FIRE AND EMERGENCY SERVICES SAFETY AND SURVIVAL (3 credits)

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 within the emergency services industry relating to safety, incorporating leadership, supervision, accountability, and personal responsibility. Instruction utilizes the lessons learned from case studies and other investigations that support cultural change throughout emergency services administration.

Prerequisite(s): FSMT 2410.

FSMT 4450 FIRE AND EMERGENCY SERVICES ADMINISTRATION (3 credits)

This course provides students with the knowledge to understand how to help the fire and emergency services administrator perform as an effective risk manager by recognizing legal and political issues affecting public safety, finding and applying appropriate legal rules and/or political constructs, and articulating supportable conclusions and recommendations.

Prerequisite(s): FSMT 2410.

FSMT 4800 SPECIAL READINGS IN FIRE SERVICE MANAGEMENT (3 credits)

This course is intended for upper-level Fire Service Management degree students who are pursuing specialized areas of knowledge in Fire Services. The course is conducted under an independent study format, and subject matter will vary based on the interests of the student and learning outcome objectives established by the instructor. Faculty approval is required prior to registration.

Prerequisite(s): Prerequisites will be established by the coordinating instructor to meet the foundational knowledge requirements for the area being studied. Not open to non-degree graduate students. EMGT students will need faculty approval.

FSMT 4860 APPLICATIONS OF FIRE RESEARCH (3 credits)

This course examines the basic principles of research and methodology for analyzing current fire-related research. The student will be able to understand the rationale that fire research organizations use for conducting fire-related research and evaluation.

Prerequisite(s): FSMT 2410.

FSMT 4900 SPECIAL TOPICS IN FIRE SERVICE MANAGEMENT (3 credits)

This course is meant to provide upper-level FSMT students with an in-depth look at current and future issues affecting the Fire Services industry and industry professionals. Possible topics include fire case studies, comparative international studies, issues in federalism, fire education, and fiscal administration. Subject matter will vary by student interest and by faculty preference. Students may repeat the course for additional academic credit as long as the course topic is not duplicated.

Prerequisite(s): Prerequisites will be established by the coordinating instructor to meet the foundational knowledge requirements for the area being studied. Not open to non-degree graduate students. EMGT students will need faculty approval.