Fire Services Administration

Faculty

Chair
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One Associate of Science degree (which requires 64 credits) and one Bachelor of Science degree are available in this online program.

As a result of rapid changes in firefighting and the administrative duties currently being experienced in the field, academic degrees are being made available to those who have chosen firefighting as a career, to enhance their knowledge base as well as to prepare them for organizational leadership positions.

The National Fire Science Curriculum Committee (NFSCC) of the United States Fire Academy Fire and Emergency Service Higher Education (FESHE) is working to attain the following objectives:

1. Creation of degree programs that teach critical thinking skills by requiring a significant number of general education courses rather than mostly fire science courses;
2. Development of associate degree programs that are transferable to baccalaureate programs;
3. Establishment of a model fire science curriculum at the associate level that universally standardizes what students learn and facilitates the application of these courses toward certification goals; and
4. Collaboration between fire certification and training agencies and academic fire programs.

Because students must complete 36 credits of general education courses in addition to other degree requirements, it is highly recommended that a student meet with an advisor prior to beginning this program. An Associate of Science degree in Fire Services Administration is required for those wishing to pursue a Bachelor of Science in Fire Services Administration. Students in the Fire Services Administration B.S. degree program must be affiliated with a fire department in order to complete the degree which requires an internship.

All Fire Services Administration courses are online. Students must have minimum computer requirements as listed in the program information packet provided at http://www.isu.edu/esd/fireservices/.

This program requires students to achieve certain grades in order to advance each semester. Specific information is available in the program’s student handbook.

Associate of Science Degree: Fire Services Administration

One of the following courses is required and will partially satisfy General Education Objective 5.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1100</td>
<td>Architecture of Matter</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1101</td>
<td>Introduction to General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1111</td>
<td>General Chemistry I</td>
<td>4</td>
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Additional Electives

Students must complete additional electives to total 60 credits.

Bachelor of Science Degree: Fire Services Administration

44 upper division credits required in the major.
Lower division (AS requirements), upper division, and electives must total a minimum of 120 credits.

Fire Service Administration majors may earn a degree in Fire Service Administration without an emphasis or a degree in Fire Service Administration with an emphasis in Political Science.
Fire Service Administration Courses (44 upper division credits)

- **FSA 3323** Fire and Emergency Services Administration 3
- **FSA 3324** Analytic Approaches to Public Fire Protection 3
- **FSA 3325** Personnel Management for the Fire Service Administrator 3
- **FSA 3326** Fire Prevention Organization and Management 3
- **FSA 3327** Fire-Related Human Behavior 3
- **FSA 3328** Disaster Planning and Control 3
- **FSA 3329** Political and Legal Foundations of Fire Protection 3
- **FSA 3330** Fire Protection Structures and Systems 3
- **FSA 3331** Community Risk Reduction for Fire and Emergency Services 3
- **FSA 3332** Fire Investigation and Analysis 3
- **FSA 3333** Applications of Fire Research 3
- **FSA 3334** Fire Dynamics 3
- **FSA 3335** Emergency Medical Services Administration 3
- **FSA 3336** Managerial Issues of Hazardous Materials 3

Select ONE additional course from the following: 2
- **FSA 4403** Field Study
- **FSA 4409** Practicum-Internship

Political Science Emphasis (15 credits)

This emphasis fulfills upper division elective requirements and requirements for a minor in Political Science and is recommended for students seeking a Master of Public Administration degree.

- **POLS 2202** Introduction to Politics Critical Thinking and Analysis 3

Six credits of political science core curriculum courses (excluding POLS 4460) 6

Six credits of elective political science courses (excluding POLS 4459) 6

2 POLS 1101, Introduction to United States Government, is required for the minor if coursework is not complete in Fire Services Administration Associate degree.

Courses

- **FSA 1101 Building Construction for Fire Protection: 2 semester hours.**
  Components of building construction related to fire and life safety. Firefighter safety, elements of construction and design of structures, building inspection, preplanning fire operations, and operating at emergencies. D

- **FSA 1102 Fire Behavior and Combustion: 2 semester hours.**
  Theories and fundamentals of fire: start, spread, and control. D

- **FSA 1103 Fire Prevention: 2 semester hours.**
  Comprehensive history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use of fire codes; identification and correction of fire hazards; and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire- and life-safety education. D

- **FSA 1104 Fire Protection Hydraulics and Water Supply: 2 semester hours.**
  Principles and theories in the use of water in fire protection and hydraulic principles to analyze and solve water supply problems. D

- **FSA 1105 Fire Protection Systems: 2 semester hours.**
  Design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers. D

- **FSA 1106 Principles of Emergency Services: 2 semester hours.**
  Overview of fire protection. Includes philosophy and history of fire protection; 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 fires service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; fire strategy and tactics. D

- **FSA 1107 Principles of Fire and Emergency Services Safety and Survival: 2 semester hours.**
  This course introduces the basic principles and history of the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services. D

- **FSA 2201 Fire Administration: 2 semester hours.**
  Organization and management of a fire department and the relationship of government agencies to the fire service. Emphasis on fire service leadership from the perspective of the company officer. D

- **FSA 2202 Legal Aspects of the Emergency Services: 2 semester hours.**
  Federal, State and local laws that regulate emergency services, national standards influencing emergency services, standard of care, tort, liability, and a review of relevant court cases. D

- **FSA 2206 Independent Study: 1-8 semester hours.**
  Addresses specific learning needs of individuals for the enhancement of knowledge and skills within the program area under the guidance of an instructor. May be repeated. Graded S/U, or may be letter-graded. D

- **FSA 2298 Special Topics: 1-8 semester hours.**
  Addresses the specific needs of industry, enabling students to upgrade technical skills that are not included in the current program curriculum. May be repeated. Graded S/U, or may be letter-graded. PREREQ: Permission of instructor. D

- **FSA 2299 Experimental Course: 1-6 semester hours.**
  This is an experimental course. The course title and number of credits are announced in the class schedule by the scheduling department. Experimental courses may be offered no more than three times with the same title and content. PREREQ: FSA 1104 and FSA 2201. D

- **FSA 3323 Fire and Emergency Services Administration: 3 semester hours.**
  Organization and management in the fire services, including new technologies and changing organizational structures, personnel functions, manpower and training, statistics and reporting systems, and the managing of finances and other resources. PREREQ: FSA 1106 and FSA 2201. D

- **FSA 3324 Analytic Approaches to Public Fire Protection: 3 semester hours.**
  Introduction to systems analysis procedures and applications in fire protection, including systems thinking, statistical analysis, concepts and their application, system models, gathering and presenting data, fire incident analysis, financial analysis, performance surveys, using results, and public fire protection. PREREQ: FSA 1104, FSA 1105, and FSA 1106. D

- **FSA 3325 Personnel Management for the Fire Service Administrator: 3 semester hours.**
  Relationships and issues in personnel administration and human resource development within the context of fire-related organizations. PREREQ: FSA 1106, FSA 2201, and FSA 2202. D
FSA 3326 Fire Prevention Organization and Management: 3 semester hours.
Techniques, procedures, programs, and agencies involved with fire prevention, including concepts of fire prevention, governmental and non-governmental fire prevention functions, organizing fire prevention efforts, fire safety-related codes, effective fire inspection, and evaluation of fire safety efforts. PREREQ: FSA 1103 and FSA 1106. D

FSA 3327 Fire-Related Human Behavior: 3 semester hours.
Human behavior in fires and disasters, arson, fire fighting, code compliance, and public fire education. Includes individual and group response during fire emergencies, fire's impact on individuals, families and the community, juvenile fire setters, arson, special populations, and the psychological impact of fire. PREREQ: FSA 1106. D

FSA 3328 Disaster Planning and Control: 3 semester hours.
Concepts and principles of community risk assessment, planning, and response to fires and natural disasters. Introduction to disaster and fire defense planning, fire department disaster planning, the incident command system, mutual aid and automatic response, and training and preparedness. PREREQ: FSA 1106. D

FSA 3329 Political and Legal Foundations of Fire Protection: 3 semester hours.
Legal, political and social aspects of the government's role in public safety, including the American legal system, legal processes, legal basis for the fire service, tort liability, negligence and fire suppression, safety, negligent operation, and the legal basis for fire safety regulation. PREREQ: FSA 1106 and FSA 2202. D

FSA 3330 Fire Protection Structures and Systems: 3 semester hours.
Design principles involved in structural fire protection and automatic suppression systems, including fire protection of buildings, fire resistance and endurance, computations and evaluation procedures for fire resistance, flame spread evaluation, and smoke production by burning materials. PREREQ: FSA 1105 and FSA 1106. D

FSA 3331 Community Risk Reduction for Fire and Emergency Services: 3 semester hours.
Community sociology, the role of fire-related organizations within the community, and their impact on the local fire problems. Introduction of community sociology, the changing nature of fire threat, and fire service relationships within the community. PREREQ: FSA 1103 and FSA 1106. D

FSA 3332 Fire Investigation and Analysis: 3 semester hours.
Examines technical investigative, legal and management approaches to the arson problem. Topics include an introduction to the principles of incendiary fire analysis, chemistry of fire, fire propagation and development, incendiary fire susceptibility, incendiary fire motivation, psychological and social motives. PREREQ: FSA 1102 and FSA 1106. D

FSA 3333 Applications of Fire Research: 3 semester hours.
Rationale for conducting fire protection research activities and applications, including fire dynamics and fire safety properties, fire test standards and codes, fire modeling, structural fire safety, automatic detections and suppression, life safety, transportation fire hazards, risk analysis and loss control, firefighter health and safety, fire service applied research. PREREQ: FSA 1103 and FSA 1106. D

FSA 3334 Fire Dynamics: 3 semester hours.
Fire dynamics within the context of fire fighting, including chemistry, physical processes and fluid dynamics, fire and combustion, explosions, ignition and flame spread, flames and fire plumes, suppression, fire dynamics applications to building codes and large-loss fires, special hazards, and fire modeling. PREREQ: FSA 1102 and FSA 1106. D

FSA 3335 Emergency Medical Services Administration: 3 semester hours.
An overview of the management of emergency medical services including organization, budget determination, purchasing and communication. Emphasis on directing and delegation of decision making including managing stress. D

FSA 3336 Managerial Issues of Hazardous Materials: 3 semester hours.
Federal and state regulations concerning hazardous materials, including health and safety, the hazardous materials management system, the incident command system, politics of hazmat incident management, site management and control, hazard and risk evaluation, personal protective clothing and equipment, and information management. PREREQ: FSA 1106, FSA 2201, and FSA 2202. D

FSA 4403 Field Study: 2 semester hours.
Field experience in directed study in a variety of professional and career-oriented situations. Open to degree candidates only. Graded P/NP.

FSA 4409 Practicum-Internship: 2 semester hours.
Supervised experience in fire service administration in a variety of command levels and responsibilities. Open to degree candidates only. Graded P/NP.