Fire Services Administration

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.

Faculty

Chair

Mikitish, Mike, Program Coordinator, Paramedic Science and Emergency Management Degree Programs; Program Director, Institute of Emergency Management. B.S. 1982, University of Arizona; M.S. 1992, Boston University; M.P.A. 2005, Boise State University. (2007)

Associate of Science Degree: Fire Services Administration

The following course is required and will satisfy General Education Objective 3.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1153</td>
<td>Introduction to Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

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

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

University General Education Requirements (http://coursescat.isu.edu/previouscatalogs/2018-19/undergraduate/academicinformation/generaleducation) (36 credits minimum) may be partially met with the following recommended courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1100</td>
<td>Economic Issues (Each partially satisfies General Education Objective 6)</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 2201</td>
<td>Principles of Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>or ECON 2202</td>
<td>Principles of Microeconomics</td>
<td></td>
</tr>
<tr>
<td>PHIL 1103</td>
<td>Introduction to Ethics (Partially satisfies General Education Objective 4)</td>
<td>3</td>
</tr>
<tr>
<td>POLS 1101</td>
<td>Introduction to United States Government (Partially satisfies General Education Objective 6)</td>
<td>3</td>
</tr>
</tbody>
</table>

Fire Services Administration Core Courses (12 lower division credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSA 1101</td>
<td>Building Construction for Fire Protection</td>
<td>2</td>
</tr>
<tr>
<td>FSA 1102</td>
<td>Fire Behavior and Combustion</td>
<td>2</td>
</tr>
<tr>
<td>FSA 1103</td>
<td>Fire Prevention</td>
<td>2</td>
</tr>
<tr>
<td>FSA 1105</td>
<td>Fire Protection Systems</td>
<td>2</td>
</tr>
<tr>
<td>FSA 1106</td>
<td>Principles of Emergency Services</td>
<td>2</td>
</tr>
<tr>
<td>FSA 1107</td>
<td>Principles of Fire and Emergency Services Safety and Survival</td>
<td>2</td>
</tr>
</tbody>
</table>

Fire Services Administration Non-Core Courses (4 credits) ¹

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSA 2201</td>
<td>Fire Administration</td>
<td>2</td>
</tr>
<tr>
<td>FSA 2202</td>
<td>Legal Aspects of the Emergency Services</td>
<td>2</td>
</tr>
</tbody>
</table>

Additional Electives

Students must complete additional FREE electives to total 60 credits.

¹ Completion of Fire Officer I (90 hours) meets this 4-credit non-core requirement.

Bachelor of Science Degree: Fire Services Administration

27-30 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 either a bachelor of science degree in Fire Service Administration without a minor or a bachelor of science degree in Fire Service Administration with a minor in Emergency Management.
Fire Services Administration Courses (27-30 upper division credits)

Students must complete all 18 credits of the FSA Core Requirements, 9 credits of the FSA Non-Core Electives, and 30-33 credits of Free Electives. The FSA Internship is required for students with less than 5 years in Fire Services.

Core Courses (18-21 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSA 3323</td>
<td>Fire and Emergency Services Administration</td>
<td>3</td>
</tr>
<tr>
<td>FSA 3325</td>
<td>Personnel Management for the Fire Service Administrator</td>
<td>3</td>
</tr>
<tr>
<td>FSA 3326</td>
<td>Fire Prevention Organization and Management</td>
<td>3</td>
</tr>
<tr>
<td>FSA 3329</td>
<td>Political and Legal Foundations of Fire Protection</td>
<td>3</td>
</tr>
<tr>
<td>FSA 3331</td>
<td>Community Risk Reduction for Fire and Emergency Services</td>
<td>3</td>
</tr>
<tr>
<td>FSA 3333</td>
<td>Applications of Fire Research</td>
<td>3</td>
</tr>
<tr>
<td>FSA 4409</td>
<td>Practicum-Internship</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Non-Core Elective Courses (9 credits required)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSA 3324</td>
<td>Analytic Approaches to Public Fire Protection</td>
<td>3</td>
</tr>
<tr>
<td>FSA 3327</td>
<td>Fire-Related Human Behavior</td>
<td>3</td>
</tr>
<tr>
<td>FSA 3328</td>
<td>Disaster Planning and Control</td>
<td>3</td>
</tr>
<tr>
<td>FSA 3330</td>
<td>Fire Protection Structures and Systems</td>
<td>3</td>
</tr>
<tr>
<td>FSA 3332</td>
<td>Fire Investigation and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FSA 3334</td>
<td>Fire Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>FSA 3335</td>
<td>Emergency Medical Services Administration</td>
<td>3</td>
</tr>
<tr>
<td>FSA 3336/EMGT 3306</td>
<td>Managerial Issues of Hazardous Materials</td>
<td>3</td>
</tr>
</tbody>
</table>

Free Electives (30-33 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMGT 1121</td>
<td>Principles of Emergency Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>At least 9 credits from the AS or BS Emergency Management Core courses</td>
<td>9</td>
</tr>
<tr>
<td>EMGT elective credits</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Total Credits: 18

Nine (9) of the eighteen (18) total credits must be upper division.

Recommended and OPTIONAL toward the Free Electives requirement of 30-33 credits:

Minor in Emergency Management

Students seeking a minor in Emergency Management must complete the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMGT 1121</td>
<td>Principles of Emergency Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>At least 9 credits from the AS or BS Emergency Management Core courses</td>
<td>9</td>
</tr>
<tr>
<td>EMGT elective credits</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Total Credits: 18

Nine (9) of the eighteen (18) total credits must be upper division.

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. PREREQ: CHEM 1100 or CHEM 1101 or CHEM 1111. 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 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 2296 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.

**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 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 1105. 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 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. 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. 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. 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 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. 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. 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. 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: MATH 1153 and FSA 1103.
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. 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. Equivalent to EMGT 3306. D

FSA 4409 Practicum-Internship: 1-3 semester hours.
Supervised experience in fire service administration in a variety of command
levels and responsibilities. Open to degree candidates only. The FSA Internship is
required for students with less than 5 years in the Fire Services. Graded P/NP.