

## Notice of Intent

Institution: Southern Illinois University Carbondale

Type of NOI: Degree Granting Authority

Degree Title: Master's of Science in Fire Service and Homeland Security Management

Level of Proposed Unit:

<input type="checkbox"/> 1-2 Year Certificate	<input checked="" type="checkbox"/> Master's
<input type="checkbox"/> Associate	<input type="checkbox"/> Post Master's Certificate
<input type="checkbox"/> 2-4 Year Certificate	<input type="checkbox"/> Doctoral
<input type="checkbox"/> Bachelor	<input type="checkbox"/> First Professional
<input type="checkbox"/> Post-Baccalaureate Certificate	<input type="checkbox"/> First Professional Certificate

Region:

<input checked="" type="checkbox"/> North Suburban	<input type="checkbox"/> South Metro
<input type="checkbox"/> Fox Valley	<input type="checkbox"/> Prairie
<input checked="" type="checkbox"/> West Suburban	<input checked="" type="checkbox"/> Southwestern
<input type="checkbox"/> Western	<input type="checkbox"/> Southern
<input type="checkbox"/> Central	<input checked="" type="checkbox"/> Chicago

Zip Code of Proposed Location: 60607, 60030, 60171, 62201, 62901

Requested CIP Code: 43.020

Proposed Date for Enrollment of First Class: August, 2011

Description of Program Objectives: The Fire Service and Homeland Security Management (FSHSM) program is designed to provide a high quality graduate education in fire service and homeland security. The program prepares its graduates with the analytic capabilities and problem-solving skills that will enable them to succeed and progress in their professional career. The program also prepares the individual to assume leadership positions in the increasingly complex world of the fire service and emergency management.

Description of Target Demographics: Working adult with a background in emergency services.

Description of Delivery Modes: The degree will be delivered in a hybrid mode that utilizes both on-site classroom instruction with an online learning component.

Projected Enrollments: 30 students at each site.

**Chicago Region:**

R.J. Quinn Fire Academy  
Chicago Fire Department  
558 West Dekoven  
Chicago, IL 60607.  
Phone: (312) 747-7236.

**North Suburban Region:**

University Center of Lake County  
1200 University Center Drive  
Grayslake, IL 60030  
Phone: (847) 665-4000

**West Suburban Region:**

Triton College  
2000 Fifth Avenue  
River Grove, IL 60171  
Phone: (708) 456-0300

**South Western Region:**

SIUC-East St. Louis Higher Education Center  
601 James R. Thompson Blvd.  
Building B, Suite 2098  
East St. Louis, IL 62201  
Phone: (618) 482-6933

**1. Mission**

Describe specific objectives and measurable contributions the program will make to the university's mission, paying particular attention to the program's consistency with the university's focus statement and priorities. Such objectives and contributions may include:

- serving a distinct student population;
- occupational and student demand for the program;
- meeting the needs of business, employers, and/or society;
- collaborating with and/or supporting other programs at the institution; and
- increasing the number of graduates in a high demand or emerging field of study.

Following the mission and goals of Southern Illinois University and the College of Applied Sciences and Arts (CASA), this application proposes a Master of Science program in Fire Service and Homeland Security Management. CASA is committed to addressing the academic needs of students seeking opportunities to acquire high level skills in specific technical areas for rapid entry into a global workforce. It is the central purpose of SIUC to seek to meet educational, vocational, social, and personal needs of its diverse population of students and helping them fully realize their potential. Southern is dedicated to quality academic endeavors in teaching and research, to supportive programming for student needs and development, to effective social and economic initiatives in community, regional, and statewide contexts, and to affirmative action and equal opportunity.

It is in this spirit, the Master of Science in Fire Service and Homeland Security Management program is designed to meet the needs of the fire service and emergency management professional. Prospective student interest surveys, feedback from industry professionals (attachment 1), and current literature review all point to high demand for graduate-level educational opportunity in this area. The concentration of this demand is in the more urban areas of the State where municipalities have full-time paid fire departments and emergency services. Due to the place-bound circumstance of these working professionals, SIUC proposes program delivery to regions including the Chicago, West Suburban, and East St. Louis areas. As a result, the initiative opens up this educational opportunity to a truly diverse population. Its delivery schedule and format is conducive to the baccalaureate graduate already working in a career position. Their goal is career advancement through graduate education but can not come to the Carbondale campus. This Masters program is well-suited for experienced fire service and emergency personnel who have earned baccalaureate degree in related fields. The degree is a perfect cap to Illinois' P-20 initiative for graduates of SIUC's off-campus Bachelor of Science in Fire Service Management. This two-year baccalaureate degree, articulates with nineteen Illinois community college AAS programs as well as five programs in neighboring Wisconsin, Missouri, and Indiana. The BS in Fires Service Management is currently offered in the regions requested in this proposal.

The increased demand for a highly educated professional fuels the need for this program not only from current and former students in our baccalaureate program, but also the industry itself. A National Professional Development Model was designed by the National Fire Academy (NFA) to explain the process of advancement from fire fighter to chief officer (attachment 2). The International Association of Fire Chiefs (IAFC) has developed a Chief Fire Officer Designation (CFOD) and professional model matrix (attachment 3). The matrix is designed to help the fire officer plan their education with benchmarks at various points in their career. It outlines which college courses are needed for the various levels of fire officer. These two programs along with a higher demand for fire personnel to have a master's degree to hold the fire chief's position make this program in high demand within the fire service industry. Dr. Denis Onieal, Superintendent of the National Fire Academy, addresses training and education in his 5 part series (attachment 4) concerning the professional status of the fire service. The proposed program will foster creative thinking and communication skills in our pursuit of excellence.

<b>2. Need</b>
Explain how the program will meet regional and state needs and priorities.

Because of current educational trends and market demands, the IAFC, the Illinois Fire Chiefs Association, and the National Fire Academy are recommending that within the next 10 to 15 years all fire chiefs across the country attain at least a master's degree in a field related to the fire service. Southern Illinois University Carbondale is prepared to meet these needs in fire service education. Currently there are only 7 programs in the country that provide a master's degree in fire service, none within our region. Similar to this proposal, all 7 of the programs are offered to accommodate the place-bound nature of this targeted student population.

The Southern Illinois University Carbondale College of Applied Sciences and Arts proposes to add a Master of Science degree in Fire Service and Homeland Security Management (MSFSHS) to meet the profession's new educational standards and changing emphasis and to remain competitive in the academic market.

A needs assessment was conducted to determine demand for this program. The survey was sent via email to personnel who expressed an interest in this type of program and they in turn passed it on to other interested parties. Using this snowball sampling strategy we received 130 responses back in a three week period. Of those responses 77 said that they would enroll in the program beginning immediately with the remainder enrolling sometime in 2011 or later.

Southern Illinois University Carbondale's goals of offering "progressive graduate education" and "careful attention to advancing its (SIUC) graduate and professional programs" have been cited as ways to make this university distinctive. We believe that this new graduate program will enhance SIUC's leadership role from a local, regional, national, and global perspective.

### 3. *Illinois 2011*

Demonstrate how the proposed program will support one or more goals of *Illinois 2011*, the Illinois Board of Higher Education's Strategic Initiative. Programs do not have to contribute to every goal, but must contribute to at least one.

Goal	How met
1. Increase educational attainment to match best-performing U.S. states and world countries.	This program targets the final phase of Illinois' commitment to education from pre-school through graduate school. This Masters in Fire Service and Homeland Security is designed for the place-bound working professional. Taking the program to the Chicago, Western Suburbs, and East St. Louis areas provides the much-needed opportunity for the truly non-traditional student. Serving these areas directly is the most effective way to eliminate any achievement gap due to race, ethnicity, socioeconomic status, gender, and disability.
2. Ensure college affordability for students, families and taxpayers.	Off-campus delivery of the program to the regions offers the most affordable option for the student wishing to pursue the degree. Cost per credit hour delivered is less than tuition and fees charged for on-campus courses. Students may continue to live and work within their region.
3. Increase the number of quality postsecondary credentials to meet the demands of the economy and an increasingly global society.	The program is geared toward the nontraditional student who is looking to improve his or her professional standing or life position. The faculty will come from across the country as well as the Carbondale campus. Graduates of this program will meet NFPA Standard 1021, Section 5 for Fire Officer IV.
4. Better integrate Illinois' educational, research, and innovation assets to meet the economic needs of the state and its region.	Given our instructional technology capabilities and partnerships with various community colleges, students will be taught using in class teaching as well as on line resources.

#### 4. Similar Programs

Identify similar programs and sponsoring institutions in the state. Compare these programs with the proposed program. Discuss the possible impact of the proposed program on the existing similar programs.

Currently there are no institutions in the state that offer a program similar to the one we are proposing. Lewis University, a private institution, does offer a graduate program that could be used to compete for employment opportunities alongside our program. It is also offered in the Chicago area which is a targeted region of this NUI request.

Lewis University offer a MS in Public Safety Administration. Their program looks at Public Safety as a whole while our program focuses on Fire Service and Homeland Security. Lewis' program is taught either in the classroom or totally on line with credit hours totaling 36 at a cost of approximately \$700 per credit hour (\$25,200). Our program will be taught in a hybrid format with credit hours totaling 39 at a cost of approximately \$350 per hour (\$13,650). Completion time for the degrees is approximately 2 years for Lewis and 16 months for SIUC. This program may have an impact on Lewis University. The SIUC degree will be more in line with career goals of students from the fire service industry and marketed in that respect. Creating a Master of Science in Fire Service and Homeland Security will increase both the awareness of and overall demand for post-baccalaureate programs of this type.

The University of Illinois Chicago has a post baccalaureate certificate program in Emergency Management and Continuity Planning.

#### 5. Future Employment Opportunities

Discuss estimated future employment opportunities for graduates of this program. Compare the estimated need for graduates with the estimated number of graduates from this program and existing programs identified above. Where appropriate, provide documentation by citing data from such sources as employer surveys, current labor market analyses, and future workforce projections (whenever possible, use state labor projections).

It is estimated that over 90% of the students who enroll in this program will already be employed in the fire service or a related emergency service industry. They have a desire to continue to improve themselves both personally and professionally within their chosen career. The industry as a whole is and has been in the process of upgrading education requirements for advancement to first line supervision, mid-level and upper management positions.

According to the Department of Labor, Bureau of Labor Statistics the expected national job growth in the Fire Service industry will be *higher than average between 2006 and 2018*. As stated in the table below, the 10-year growth rate for supervisors and managers is projected at 8%.

**NBL National Projected Growth in Fire Service Employment 2008-2018**

Standard Occupational Classification (SOC)Title	Base Year	Proj. Year	Employment	Change
	Employment	Employment	2008-2018	
	2008	2018	Number	Percent
Firefighting Occupation	365,600	427,600	62,100	17
First Line Supvrs/Mgrs of firefighting and prevention workers	55,200	59,700	4,500	8
Firefighters	310,400	367,900	57,000	19

The National Bureau of Labor Statics/Illinois projection for 2006-2016 estimates a growth of 12.08% in the areas of first line supervisors and managers for the State.

**NBL Illinois Projected Growth in Fire Service Employment 2006-2016**

Standard Occupational Classification (SOC)Title	Base Year	Proj. Year	Employment	Change
	Employment	Employment	2006-2016	
	2006	2016	Number	Percent
Protective Service Occupations	148,909	169,615	20,706	13.91
1st-Line Spvrs/Mgrs, FireFight/Prev	1,598	1,791	193	12.08
1st-Line Spvrs/Mgrs, AO Prot Serv	2,294	2,497	203	8.85
Fire Fighting & Prevention Workers	18,241	20,378	2,137	11.72
Fire Fighters	17,591	19,664	2,073	11.78
Fire Inspectors and Investigators	615	676	61	9.92
Forest Fire Insp & Prev Specs	35	38	3	8.57

There are several factors that will determine the need for mid and upper-level supervisors and managers. Along with the natural attrition through retirement and illness of existing positions, there are even greater projected opportunities as more departments go from volunteer, part-time paid to full-time paid departments. Something else that has to be considered is the fact that more communities are bringing in a full time chief to run their volunteer or part time paid departments as well as perform emergency management duties.

Along with the higher than average projected employment rates, these government reports also discuss the highly competitive nature of positions in the fire service industry.

Currently, the educational requirements for management positions are set by each municipality. These requirements vary widely across the country and even within

various regions of the U.S. For instance, Chicago Fire does not require education for promotion but they do give points towards promotion if a degree is completed. Sedgewick Fire District #1 in Kansas is requiring degrees effective 2012. The Fire Department of New York does not require the degree, but rather equivalent hours for promotion (i.e. 60 hours for Capt. and 120 for Chief officer). All of these requirements are negotiated into firefighter contract for the respective organizations.

It is a commonly held view that education and experience are the primary factors in maintaining a competitive edge for advancement to management positions.

<b>6. Background</b>
----------------------

Describe the development of the program, including historical and institutional context of the program's development. Also discuss any special needs for this program as expressed by state agencies, industry, research centers, or other educational institutions.
--

This program has been developed with the input and guidance of the Fire and Emergency Services Higher Education Bachelor's/Graduate Curriculum Committee, advisory committee, employers, current and former students, and the industry in general. There have been several articles written concerning education in the fire service (attachment 5).

SIUC has successfully delivered a Bachelor of Science in Fire Service Management for 33 years. As of Fall 2009, SIUC has graduated 569 students in the previous 10 years. During that same 10 year period the Fire Service program had an average yearly enrollment of 115 students. This degree is currently offered in the regions requested in this proposal. It is delivered on the campus of Triton College in the Chicago Region, University Center, College of Lake County in the West Suburban Region, and the East St. Louis Higher Education Center within the Southwest Region.



<b>7. Program Description</b>
-------------------------------

a. Provide a brief narrative description of the program, including a list of its central academic objectives. Explain how the curriculum is structured to meet the program's stated objectives. Describe the program's mode of delivery (e.g., face-to-face, online, hybrid, etc.).
---

**Master of Science in Fire Service and Homeland Security Management**

The MS in Fire Service and Homeland Security program is designed to prepare students for administrative and executive positions in fire and emergency management within business and government organizations. The program emphasizes the ability to comprehend legal, ethical, economic and political forces as they affect strategic planning, implementation and decision making within emergency services.

To meet the needs of place-bound working professionals, the program will be delivered to off-campus locations in the Chicago, North Suburban, West Suburban and Southwestern regions. The mode of delivery for this program will be in a hybrid mode that utilizes both on-site classroom instruction and an online learning component. The program support's the SIU President's enrollment priorities for the university to respond to the needs of appropriate market niches, to establish collaborative educational partnerships, and to strengthen the University's leadership role with community colleges, industry and labor organizations.

Academic Objectives of the MS in Fire Service and Homeland Security Management include:

Objective 1 To meet the workforce needs of business and government for well-trained executive managerial leadership in fire service and emergency management organizations.

Objective 2 To create a learning environment in which students attain the critical thinking skills and problem solving skills to diagnose, analyze, and provide solutions to complex fire service and emergency management situations.

Objective 3 To offer graduate degree programming to a specific market niche of non-traditional, place-bound working professionals giving them the necessary credential for career advancement.

Objective 4 To develop a flexible and affordable curriculum delivery format that is conducive to a full-time working individual's schedule.

Objective 5 To develop and expand the fire service and emergency management body of knowledge and discipline.

To meet Objectives 1 and 2, the curriculum was developed by the faculty in collaboration with the Advisory Sub Committee for curriculum (attachment 6), employers and working professionals to meet the needs for emergency management executives. The courses address the basic concepts and terminology in key functional areas of emergency management, disaster preparedness, and executive leadership. Special focus is placed on developing key skills (written and oral communication skills, computer skills, team-work skills, and leadership skills) required for successful emergency management careers. The 39-hour program consisting of 12 core course culminates with a 3-hour practicum experience.

To meet Objectives 3 and 4, the university requests to offer the program in strategic locations within the state that contain the highest concentration of full-time fire and emergency service personnel in need of graduate credentials for career advancement. This also coincides with the locations of SIUC's undergraduate degree in Fire Service Management. In turn, this similarly-designed baccalaureate degree currently articulates with 21 regional community college AAS related programs. The mode of delivery will be double-faceted. The first delivery mode will use a combination of classroom instruction and distance learning at selected sites. This will be a combination of face to face instruction with some online components. The second delivery mode will be a complete online component. Blackboard will be used for the delivery of syllabi, schedules, course objectives, evaluation expectations, pretests, posttests, etc. The proposed weekend delivery format blended with online and web-enabled content is essential to meet this market niche.

Objective 5 will be met as faculty pursue research interests and assist students in their scholarly pursuit of knowledge through coursework, practical exercises, and research. One of the College of Applied Sciences and Arts (CASA) goals is to implement additional graduate programming for training the workforce of the 21<sup>st</sup> century.” The Master of Science in Fire Service and Homeland Security Management program will increase the emphasis on research in a student-responsive approach as it applies to their career.

#### CATALOG DESCRIPTION

##### Program Description:

Graduate work leading to a Master of Science in Fire Service and Homeland Security Management (FSHSM) is offered by the College of Applied Sciences and Arts. The program prepares its graduates with the analytic capabilities and problem-solving skills that will enable them to succeed and progress in their professional career. The 39-hour curriculum develops advanced administrative, managerial, and leadership skills critical to career advancement and promotion within these industries. The academic setting of this program will foster creative thinking and communication skills in our pursuit of excellence. The program culminates in an applied practicum as opposed to a thesis.

Curriculum Guide:

**FALL .....9 hrs**

FSM 513-3 Organizational Leadership  
FSM 514-3 Ethics and the Challenge of Leadership  
FSM 508-3 Critical Issues in Homeland Security Management

**SPRING.....9 hrs**

FSM 505-3 Executive Leadership in Fire, Homeland Security,  
and Emergency Management  
FSM 510-3 Dispute Resolution/Mediation/Negotiation in the  
Fire Service  
FSM 503-3 Public Policy/Ethics in the Fire Service

**SUMMER .....9 hrs**

FSM 501-3 Legal Administrative Law for Fire, Homeland  
Security, and Emergency Management  
FSM 504-3 Fiscal/Financial Management in the Fire Service  
FSM 507-3 Public Management of the Fire Service

**FALL.....12 hrs**

FSM 502-3 Emergency Management  
FSM 509-3 Strategic Planning in Fire, Homeland Security,  
and Emergency Management  
FSM 511-3 Critical Thinking and Decision in Fire,  
Homeland Security, and Emergency Management  
FSM 512-3 Practicum Exercise

Courses (FSM):

**FSM 500-3 Terrorism, WMD, Contemporary Issues**

Historical evolution of terrorism and weapons of mass destruction. Analyzes current theories and mitigation, preparedness, and response tactics.

**FSM 501-3 Legal/Administrative Law**

Administrative law is the law governing the powers, limits and operations of government administrative agencies, and the rights of individuals in dealing with those agencies. Much of this course is about two statutes and related court cases: The Administrative procedure Act of 1946, governing the federal agencies; and the Model State Administrative Procedures Act, governing Oklahoma and many other states. Other statutes applying to administrative agencies, such as the Freedom of Information Act, the

National Environmental Policy Act, and the Open Meetings Act will also be examined. In addition, the course deals with provisions of the U.S. Constitution that constrain administrative agencies and define the rights of individuals before administrative bodies.

**FSM 502-3 Emergency Management**

This course examines historical and contemporary theories, principles, and practices of Emergency Management, particularly the all-hazards approach and the related processes of mitigation, preparedness, response and recovery. Using a case study approach, the course considers the evolution of Emergency Management and its practical application within government and private-sector institutions. The roles, responsibilities, and duties of Emergency Managers at various levels of government are discussed, as are the relationships between the agencies, organizations, and individuals involved. The course acquaints students with the National Response Plan and such contemporary Emergency Management systems as the National Incident Management System (NIMS), with specific attention paid to their applicability to crises that include terrorist events, natural and man-made disasters, and other hazards.

**FSM 503-3 Public Policy/Ethics**

The focus of this course is on how public action takes place; what courses of action are available; and the implications, costs, and consequences of those actions. The Fire Service Executive of the future will require a more disciplined understanding of public policy. This course will encourage a familiarity with public issues that will be useful for Fire Service Executives in making administrative or policy decisions. Further, this course will enhance the executives' sense of their own influence in their work environments, their community, their profession, and in the broader realm of political life at the local, state, and national level.

**FSM 504-3 Fiscal/financial Management**

This advanced introduction to fundamentals of financial management emphasizes analysis of financial statements, organizational-departmental-divisional cash flows, taxes, the financial environment, bonds and their valuation, stocks and their valuation, and the cost of capital.

**FSM 505-3 Executive Leadership**

This course includes leadership, multiple roles, decision making skills, influencing, leaders teaching leaders, storytelling, persuasion, succession planning, and evaluating.

**FSM 506-3 Disaster Preparedness and Crisis Management**

Students will receive the preparation necessary to uniquely manage and make critical decisions regarding a major incident or disaster. The course focuses on specialized decision-making processes involving analytical

methods and information management; interaction with other agencies and effective coordination of roles and efforts within a structured command system offer the crisis manager decisions in an unstructured environment; major events that have happened to the fire service; and how to prepare for the unexpected, including how to be a strong leader dealing with instant life and death decision making on the emergency scene.

**FSM 507-3 Public Management**

The purpose of the course is to provide a survey of the theory and practice of management in public sector organizations. Emphasis will be given to a comparison of management in the public and private sector, management functions, and the context in which the public manager must perform the functions. Students must complete pre-class, in-class, and post-class assignments. In-class assignments include small group projects that require the application of management theory to practical problems.

**FSM 508-3 Critical Issues in Homeland Security Management**

This course examines the evolving nature of the Homeland Security enterprise by examining a number of contemporary topical issues and their immediate and long-term impact on Homeland Security policies, and practices. Particular attention is paid to the role of the media, law, governmental and non-governmental organizations, and political entities at the federal, state and local levels in determining and shaping Homeland Security policy and practice.

**FSM 509-3 Strategic Planning**

This course examines and defines the steps, concepts, theory, and value of comprehensive strategic planning. Students will participate in the formulation, financial development, operational management, and evaluation of currently utilized strategic plans and take part in the outline and design of a mock strategic plan.

**FSM 510-3 Dispute Resolution/Mediation/Negotiation**

This course is about labor relations and employment disputes in the public sector and the various methods for resolving labor and personnel conflicts. Collective bargaining, arbitration, mediation, and other alternative dispute resolution methods will be applied to cases and simulation exercises relevant to government employment.

**FSM 511-3 Critical Thinking and Decision Making in Fire, Homeland Security, and Emergency Management**

This course is an examination of knowledge and research as they pertain to public safety. Exploration of the relationship between creative and critical thinking, analysis of scientific methodology and logic, language and interpretation and their influence on public safety organizations.

**FSM 512-3 Practicum**

Under the supervision and direction of a member of the faculty, students will undertake a project involving substantive participation in managing a major simulation, exercise or drill involving multiple agencies or institutions. Student involvement will include planning, designing, developing, conducting, and evaluating the simulation or drill. Restricted to: Students in their final semester of the program.

**FSM 513-3 Organizational Leadership**

This course is the third in the continuing series of the International Public Safety Leadership and Ethics Institute. The participant will explore the leadership process and the leader-follower relationship within organizational settings. Additionally, the influence of organizational culture, values, and contemporary societal issues on leadership effectiveness will be explored, as well as the concepts of learning organizations, organizational health, defenses, and change. Participants will also explore how a leader moves an organization from vision to action. Case studies, video analyses, selected readings, and group activities will be used to help the participant further understand the theories and principles of organizational leadership. Prerequisites: FSM 305 and 405 or Advisor approval.

**FSM 514-3 Ethics and Challenges of Leadership**

This is the final course in the series of the International Public Safety Leadership and Ethics Institute. In this course the participant will correlate personal core values and characteristics to ethical decisions and behaviors. In addition, the participant will explore ethical and principle-centered leadership, including ethical systems, ethical dilemmas, and ethical decision-making models. The participant will also examine challenges and develop strategies for leading in public safety organizations serving diverse and dynamic communities. The participant will use a variety of learning modalities including case studies, video analyses, and critical thinking scenarios to explore ethics and the challenges of leadership. Prerequisite: FSM 305, 405, and 513 or Advisor approval.

b. If the institution has been granted authority to offer this degree in another region, indicate the institution's plan to assure course content, coverage, and standards are consistent.
--

The institution has not been granted authority to offer this degree in another region.

<b>8. Admissions Requirements</b>
-----------------------------------

Provide a brief narrative description of minimum admission requirements.
--

In order to be admitted to a degree program, an applicant must meet Graduate School and program admission requirements.

General requirements for domestic student admission to SIUC Graduate School include: a 2.7 grade point average (on a 4.0 grading scale) on the last two years of Bachelor's degree coursework or a 3.0 grade point average on all previous graduate work. Specific requirements or equivalences for foreign student admissions and early admission consideration may be found on the SIUC Graduate School website at <http://www.gradschool.siuc.edu/admissions.html>.

Applicants to master's degree level study may begin the admissions process when they need no more than 32 semester hours beyond the credit shown on their transcript at the time of application to complete all requirements for the bachelor's degree.

Any applicant who has completed 12 or more semester hours of graded graduate work at an accredited U.S. educational institution, and who has a GPA of 3.00 or better on all graduate work, may be exempted from the 2.7 undergraduate grade point average requirement. Any student with fewer than 12 hours of graduate work may be admitted to the Graduate School on the basis of undergraduate GPA only.

To meet program requirements, candidates must have a baccalaureate degree from an accredited institution or have completed all undergraduate degree requirements prior to the beginning of the classes for the term for which admission is sought. Preferred consideration is given to applicants with a bachelor's degree in Fire Science, Fire Service, Emergency Management, Emergency Medical Services (EMS) and Homeland Security, or individuals with other baccalaureate degrees with direct experience in fire fighting, EMS or related experience. All applicants will submit an essay outlining the individual's background in the field and future career goals as part of the application process.

<b>9. Graduation Requirements</b>
-----------------------------------

Provide a brief narrative description of all graduation requirements, including, but not limited to, credit hour requirements.
--

To earn the Master of Science in Fire Service and Homeland Security Management, the student must complete the 39 hours of coursework outlined in the degree or approved electives and earn an overall grade point average of at least 3.00 in all graduate work.

No more than half of the credit applied toward fulfillment of the master's degree requirements may be earned at other universities and transferred to SIUC.

A student has six calendar years to complete the degree. This time is calculated from initial enrollment to completion of all degree requirements including any document that must be approved by the Graduate School.

<b>10. Student Outcomes</b>
-----------------------------

Explain what students are expected to know and/or be able to do upon completing the program.
--

Upon completion of the MSFSHS Program students will:

1. Describe basic operations of fire suppression, emergency management, and homeland security.
2. Have a basis for critical review of literature.
3. Apply knowledge and exercise autonomy in decision making processes to provide a broad range of solutions.
4. Demonstrate independent thinking, while reinforcing the concept of team practice, when making decisions.
5. Use knowledge gained through education, research, and administrative activities in the provision of services to the community.
6. Actively seek to expand their knowledge and skills to keep current with research and advances in the fire service appropriate to the role and responsibilities of the chief fire officer.
7. Recognize and appropriately resolve ethical issues encountered in the fire service such as diversity, confidentiality, professionalism and ethics as they relate to the chief fire officer.
8. Describe the principles and content of the discipline to articulate and enhance the role and utilization of the chief fire officer.
9. Demonstrate attitudes that promote collegial and productive relationships with supervisory personnel.

<b>11. Assessment of Student Learning</b>
---

Describe how the realization of student outcomes identified above will be measured. Measures may include end- or near-end-of-program assessment of student learning, in addition to course by-course assessment such as: (1) evaluation of capstone experiences (senior projects, recitals, exhibits, portfolios, etc.); (2) pre- and post-testing (value-added assessment). Indicate institutional plans to assure the credibility of assessment and evaluation of student learning in the proposed setting (i.e., outside of physical proximity to the home campus).
--



- a. Comprehensive pre and post tests will evaluate the students' incoming and outgoing knowledge.
- b. Research projects for FSM 512 will be assessed to ensure all students are involved in research intensive projects.
- c. Students will be surveyed at the end of each class, and at the end of the program to evaluate student satisfaction.
- d. Graduates will be surveyed to evaluate graduate satisfaction at one year and 5 years post graduation.
- e. Employers will be surveyed to evaluate employer satisfaction at one year and 5 years post graduation.

<b>12. Program Accreditation</b>
----------------------------------

Describe the institution's plans for seeking programmatic accreditation if applicable.
--

Program accreditation will be maintained through the International Fire Service Accreditation Congress (IFSAC), which accredits and reaccredits every five years. Currently, the Bachelor of Science in Fire Service Management program is accredited through IFSAC. When the Master's degree is finalized, it will be sent to IFSAC for review and inclusion in the accreditation currently held by the Fire Service Management Program.

<b>13. Graduate Licensure</b>
-------------------------------

Indicate if this program prepares graduates for entry into a career or profession that is regulated by the state of Illinois. If so, indicate how the program is aligned with licensure/certification and/or entitlement requirements.
--

None

#### **14. Program Assessment**

a. Describe the program's assessment plan, which should include the following elements: serving a distinct student population;

- Multiple performance measures, if necessary, that reflect the uniqueness of the academic program and discipline such as: (1) standardized or other comprehensive examinations; (2) certification examinations;
- Feedback from key stakeholders (current students, alumni, employers, graduate schools, etc.); and
- Evidence of a formal feedback/improvement mechanism, i.e., that the program/unit has a regular review process in place and that the results of this process are used to improve curriculum, instruction, and learning.
- The program assessment plan should indicate submission of a progress report during the 3<sup>rd</sup> year of operation and participation in the IBHE's 8-year program review process.

- a. The program will seek and attain accreditation from the International Fire Service Accreditation Congress. Its accreditation will be in conjunction with the current and ongoing IFSAC accreditation of its Bachelor of Science in Fire Service Management program.
- b. IFSAC accreditation review is conducted every 5 years. It requires an extensive self-study by the unit, external review by the agency, and a detailed follow-up report. All stakeholders in the unit, including administration, faculty, staff, and the Division of Off Campus Academic Programs are involved in the review process and in considering and addressing outcome recommendations of the review committee.
- c. Students will be surveyed at the end of each class, and at the end of the program to evaluate student satisfaction.
- d. Graduates will be surveyed to track job placement and career advancement and evaluate graduate satisfaction at one year and five years post graduation.
- e. Employers will be surveyed to evaluate employer satisfaction at one year and five years post graduation.
- f. A bi-annual meeting of the faculty, director and industry advisory committee will be convened to review the curriculum, feedback attained from assessment instruments, and current status of the industry. Results of this meeting will be used to help guide program improvement.
- g. At the end of the 3<sup>rd</sup> year a progress report will be sent to IBHE on the status of the program. The program will also be assessed by IBHE at least once every 8 years per their review process.

b. Identify measures to be used to assess and improve student learning, curriculum, and instruction. Evidence of success may include such specific outcomes as:

- Percent pass rate of graduates on end-of-program certification/licensure examinations;
- Enrollment of graduates in graduate and/or professional programs or other subsequent education;
- Percent of graduates employed in the field;
- Career advancement achieved by program graduates;

- Graduate/employer satisfaction with the program;
- Retention and graduation rates and time-to-degree completion;
- Percent of students involved in faculty research or other projects; and
- Percent of graduate students presenting or publishing papers.

It is anticipated that approximately 95% of our graduates will be employed in the fire service or emergency management fields.

With the target market of this degree being working professionals, it is more in line with executive masters programs. Evidence of success of the program focuses more on advancement in employment opportunity than on publication and presentation of research.

Through one year and five year graduate follow-up, data will be collected to assess entry-level employment and career advancement. In addition to employment data, this follow-up will also include collecting feedback concerning graduate satisfaction with the program. This data, along with a similar survey targeting the employers of the graduates will become instrumental in a continuous improvement process for the program.

The full curriculum will be made available on a 16-month cycle. It is expected that most students who begin this degree will stay the course to completion, but because they are working adults, it may take them a little longer than the graduate student attending a traditional on-campus program. It is predicted however, that at least one-half of all students will complete the program at the end of the first cycle of courses. SIUC's Department of Institutional Research will prepare detailed reports concerning retention rates and time-to-degree of the students in this program. This data will be benchmarked against traditional on-campus degree programs as well as that of similarly delivered programs.

c. If the institution has been granted authority to offer this degree in another region, indicate the institutions plan to assure assessment measures are consistent.

The institution has not been granted authority to offer this degree in another region.

<b>STUDENT ENROLLMENT PROJECTIONS FOR THE PROPOSED PROGRAM</b>					
	1st Year	2nd Year	3rd Year	4th Year	5th Year
Number of Program Majors (Fall headcount)	28	35	40	40	40
Annual Full-Time-Equivalent Majors	21	27	30	30	30
Annual Credit Hours in EXISTING Courses*	0	561	807	807	807
Annual Credit Hours in NEW Courses*	585	180	0	0	0
Annual Number of degrees Awarded	0	15	15	15	15

\*Include credit hours generated by both majors and non-majors in courses offered by the academic unit directly responsible for the proposed program.

## Public Degree Program Out-of-Region Application

Estimated Costs and Sources of Funds for Proposed Program						
Illinois Higher Education						
			Year of Operation			
			1st Year	2nd Year	3rd Year	4th Year
<b>Expenditure</b>						
Personnel						
Faculty Count	by # of FTE		3	3	3	3
	Personal Services in \$		36000	36000	36000	36000
Other Personnel Costs in \$			13500	13500	13500	13500
Supplies, Services, Equipment <sup>1</sup> in \$			155054	173087	179759	179759
Facilities in \$			0	0	0	0
	<b>Total</b>		<b>204554</b>	<b>222587</b>	<b>229259</b>	<b>229259</b>
<b>Resources</b>						
Current Unit			0	0	0	0
Other Internal Sources <sup>2</sup>			0	0	0	0
Federal Funds			0	0	0	0
Fees, Sales, Other Income			0	0	0	0
New State Appropriation <sup>3</sup>			0	0	0	0
	<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<sup>1</sup> Includes expenditures for library resources.

<sup>2</sup> Reallocation within institution from other budgetary unit.

<sup>3</sup> Complete table 2 if greater than zero.

Note: Do not estimate inflationary factor.

Narrative must accompany this table



Public Degree Program Out-of-Region Application

Estimated Expenditures of New State Appropriations for Proposed Program						
Illinois Higher Education						
			Year of Operation			
			1st Year	2nd Year	3rd Year	4th Year
Expenditures tied to New State Appropriation						
	Personnel					
	Faculty Count	by # of FTE	0	0	0	0
		Personal Services in \$	0	0	0	0
	Other Personnel Expenditures in \$		0	0	0	0
	Supplies, Services, Equipment <sup>1</sup> in \$		0	0	0	0
	Facilities in \$		0	0	0	0
		<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<sup>1</sup> Includes expenditures for library resources.

Note: Narrative must accompany this table

<b>15. Budget Narrative</b>
-----------------------------

Provide a brief narrative of the resource requirements included in the Budget Table.
--

This program will be a cost recovery program supported entirely from student tuition. There is no new money being requested from state appropriations to support this program. The income and expenditures reflected on the tables are derived from anticipated student enrollment and credit hour generation. It should be noted that this budget narrative reflects the projections for one individual site. If approved, SIUC plans to focus on establishing one of the Chicago area sites in Year one. The other sites will be established as market demand increases to a level that meets projected expenditures and delivery can begin. This budget model would be replicated for each of those sites. The only variance may be in a reduction in some of the centralized supplies, services and equipment expenses made possible through simple economy of scale.

### **Enrollment Projections**

These projections are based on a historical understanding of student enrollment patterns of current off-campus academic programs and an understanding of this particular target market of students. The majors of this program will continually try to balance a desire to progress as quickly as possible through the program with their responsibilities toward full-time jobs and families. There are three 16-week semesters in the calendar year. In any given semester, a portion of the students will be enrolled full time (9 hrs/semester) while others may only be able to take one or two courses. The enrollment status for any given individual may change from semester to semester. A full-time equivalent (FTE) student would be reflected by the generation of 27 credit hours in the 3-semester academic year.

The budget was developed anticipating a Year One headcount of 28 students. It is predicted that 14 students will enroll full-time at 9 semester hours, 9 will enroll in two courses (6 hrs), and 5 will enroll in 3 semester hours. This blend of enrollments generates 195 credit hours per semester. This results in an annual credit hour production of 585 credit hours or an FTE of 21 per semester.

The 12-course curriculum is offered over four consecutive semesters. The culminating *FSM-512 Practicum* course is only available to majors in their last academic semester or later. It will be offered beginning the fourth semester and each subsequent semester to accommodate the staggered completion dates of the majors. It is anticipated that five of the original 28 majors will successfully complete the 9-hour course curriculum and the Practicum and graduate in that first fourth semester. It is projected that five majors will graduate each subsequent semester or this would mean projecting 15 graduates annually beginning in Year Two. With the addition of the Practicum and the expected enrollment growth to 35 active majors in Year Two, the program will generate 741 credit hours or an FTE of 27.

By Year Three it is predicted that the program will reach full active enrollment of 40-headcount per semester. Given a consistent blend of full-time and part-time enrollments, it is predicted that the program will level off at generating 807 credit hours per year or an FTE of 30. New admits to the program will be governed by the completion rates of the majors and any attrition causing students to become inactive or leave the program.



## **Estimated Costs and Sources of Funds for Proposed Program**

### **Resources**

#### **Current Unit:**

Tuition is the sole source of income to this program. It is estimated that in the first year of operation (budget year) enrollment will generate 585 credit hours. At a rate of \$350 per credit hour, this generates a total income of \$204,750. It is expected that the program will grow by several students each semester, but we also expect a slight attrition rate each semester due to job requirements, lack of funds, and a variety of other personal reasons.

We expect most students who begin this degree will stay the course to completion, but because they are working adults, it may take them a little longer than the graduate student who transitions directly from their bachelor's program into a master's program. We do predict however, that beginning in Year Two the program will produce 15 graduates per year. Given modest growth in Year Two and growth to full enrollment by Year Three, annual income will increase to \$259,350 and \$282,450 respectively.

### **Expenditure**

**Faculty Count:** Faculty are hired at a projected rate of \$3,000 per course and not contracted for an entire semester or academic year, therefore the faculty FTE was calculated at .25 FTE for each of the nine courses taught during the first academic year or a faculty FTE of 2.25. In addition, a .25 FTE equivalent is included for course development for each semester the first year for a total of 3.0 FTE. In the second year twelve courses will be taught because a fourth course, the Practicum, is added to the last semester of the first cohort and will be offered in all subsequent semesters, bringing the FTE to three per year for the remaining years of the program.

**Other Personnel Costs:** There will be no on-site advisor. There will be a Director of Graduate Studies on campus to manage the program and advise students. This person will be a continuing faculty with graduate faculty status. The Director will have a 25% release of assignment to perform these duties. The clerical duties of the Director in terms of advisement are included in the services provided by the Office of Off-Campus Academic Programs.

**Services, Supplies, Travel and Equipment:** Services include an overhead cost for support systems that make conducting off-campus programs possible. Twenty-eight point six percent of the total income generated is paid to the University's general fund (\$58,558). The remaining income of \$146,192 is considered Program Delivery Costs (PDC). Twenty percent (\$29,239) of the PDC is paid to the Office of Off-Campus Academic Programs and 5% (\$7,310) is paid to the Division of Continuing Education, and approximately 1.84% (\$2,690) is paid to cover group health costs. The remaining (\$106,953) funds are used for supplies, salaries, travel and equipment.

The projected income and expenditures for the first budget year is listed below. Any surplus revenue will be allocated to program development and improvement and/or the

program contingency fund. The purpose of the contingency fund is to compensate for revenue shortfall.

**Facilities costs:** There are no facilities costs associated with this program at these locations.

First Year Budget

Income:

Tuition: (585 cr-hrs \* \$350/cr-hr)      \$204,750

Expenditures:

Services	(\$97,797)
Faculty	(\$36,000)
FSHSM Director of Graduate Studies (25% position)	(\$13,500)
Supplies and Equipment	(\$33,300)
Travel	(\$24,000)
Facilities	\$ 0
TOTAL Expenditures	(\$204,597)

FY 1 Contingency      \$153

#### 16. Facilities and Equipment

Describe the facilities and equipment available to develop and maintain a quality program including buildings, classrooms, laboratories and equipment, clinical sites, office space, and library resources. Indicate plans to ensure students have the appropriate training in the use of technologies for learning and are provided with necessary training prior to the beginning of the program.

Chief academic and financial administrative responsibilities of the School of Information Systems and Applied Technologies lie with the Director. The School is adequately staffed in support of its programs and the Director by full-time employees in the roles of Program Coordinator for the Fire Service Management program, School Administrative Assistant, Office Systems Specialist II, and Computer Information Specialist. Additionally, the Office of Off-Campus Academic Programs maintains a fulltime staff that provides academic advisement support, financial advisement support and computer support to the FSM off-campus program.

Students and faculty have access to technical support when registered for classes or on contract to teach courses. Additionally, the Office of Off-Campus Academic Programs (OCAP) employs a microcomputer specialist who is available to assist faculty and students as needed.

Students in the FSM Master's program will have access to relevant and up-to-date information resources that will enable them to successfully meet the program requirements. Students will use SIU university-wide resources available online and through Morris Library. Morris Library has an impressive holding of 2,466,780 volumes: current serials are 30,512; microform units are

3,618,778; and government documents are 312,153. These collections are available in print and/or electronic form, including videos, CD, and DVD. As SIUC is a member of the Association of Research Libraries (ARL), every effort is made to acquire the most up-to-date material for our students. Available resources for students will be supplemented by the inter-library loan program which is operated at Morris Library. Through the inter-library loan program, students are able to borrow various items from other libraries throughout the US that are not available to us.

The place-bound students who are in the distance education classes and/or off-campus academic programs are able to get access to all the library resources online wherever/whenever they have access to the Internet. In addition, the students can take advantage of the online chat reference service for any immediate questions or requests.

The Interlibrary Loan unit provides access to materials not available at SIUC. All students, including Distance Learners and Off-campus Academic Program students can use Interlibrary Loan free of charge.

As the second level of resources support, students can use various resources available to individual faculty members. Many of our faculty members have individual subscriptions to journals (that are not available in the libraries) and have acquired rich collections of personal items that would be useful to students.

Student access to the necessary library resources is accomplished thru the articulation agreement with the community college on site and also thru the use of the Morris Library on line (See attachment 7).

**Blackboard Learning System:**

- The Blackboard Learning System, a Web-based server software platform, is to be embraced for course delivery and management. One of the main purposes of adopting the web-based learning system is to add online elements to courses traditionally delivered face-to-face and to develop a completely online, virtual learning environment with few or no face-to-face meetings.
- In a snapshot, the Blackboard Learning System supports effective teaching for the instructors to upload and post instructional materials, communicate with students, return students' work, collect and organize student grades, disseminate questionnaires, administer examines and perform assessments, track student performance/activities, etc. Place-bound students can review learning materials, take exams, submit assignments, conduct group discussions, and perform peer assessment via a virtual learning platform.
  - The grading tool of the system provides students and instructors with insight into the student's academic progress. In addition, to best support student achievement, instructors can track student progress and adapt instruction accordingly via the performance dashboard and early warning system. The system also offers self-assessment quizzes that can be scored automatically.
  - Blackboard offers a suite of communication and collaboration tools that enhance student engagement and provide opportunities for social learning.
  - The assessment and survey tools offer flexible solutions to assessment design that are appropriate to pedagogical needs, including multiple assessment methods that support multiple teaching and learning styles. Automatically graded

- assessments not only save teachers time but also provide students with crucial instant feedback.
- Other features that support effective teaching and learning include: a notice board for up-to-date course information, electronic communication support including e-mail, threaded discussions and a chat room (with or without a moderator), and production of documentation and statistics on the course in the format required for institutional administration and quality control
- Technical Support: J.P. Dunn (the University's Blackboard administrator) and other Blackboard support staff at the Instructional Support Services offer on-demand supports for instructors and students; “Instant Message the Blackboard Help Desk” gives the students the flexibility of seeking the right answers at their fingertips.

### **SalukiNet**

Finally, all SIUC students have access to the SIUC SalukiNet Web Student Information System. SalukiNet is a Web portal to a variety of SIUC student services, University information, and a student’s secured personal academic records. Students have instant secure access to their records that are maintained by the offices of Records and Registration, Undergraduate Admissions, Bursar, and Financial Aid.

<b>17. Faculty and Staff</b>
------------------------------

Describe the personnel resources available to develop and maintain a quality program including faculty (full- and part-time, current and new), staff (full- and part-time, current and new), and the administrative structure that will be in place to oversee the program. Also include a description of faculty qualifications, the faculty evaluation and reward structure, and student support services that will be provided by faculty and staff.
---

The following information is applicable to program delivery for all three regions.

The unit is well-equipped with personnel to manage, maintain, and deliver the proposed program at the off-site regions identified in this proposal. This includes a core of cross-disciplinary graduate faculty from the College of Applied Sciences and Arts, School of Information Systems and Technology, College of Education & Human Services, School of Health Safety & Recreation and the College of Agricultural Sciences, School of Forestry. This includes a Director of Graduate Studies for the FSHSM program. The curriculum will be directed by a curriculum committee consisting of personnel from the FSM Advisory Committee and faculty teaching within the program.

The unit also has highly qualified full-time and part-time non-tenure track faculty. These faculty members hold academic credentials and industry experience specific to targeted courses that they teach (attach 8). The criteria for non-tenure track faculty selection to teach in off-campus programs are the same as those used to select on-campus faculty. Selection of non-tenure track faculty is done at the main campus by the School of Information Systems and Applied Technologies Fire Management Service faculty selection committee.

The criteria for faculty selection to teach in off-campus programs are the same as those used to select on campus faculty, i.e., content knowledge/expertise, appropriate professional background, and

teaching experience. Selection of faculty is done at the main campus by the School of Information Systems and Applied Technologies Fire Service Management faculty selection committee.

Teaching effectiveness is gauged by the results of student feedback to Instructor/Course Evaluation at the end of each course. Evaluations are designed to identify strengths and weaknesses in teaching performance, classroom management, and content delivery. The evaluation instrument used in off-campus delivery will contain similar items as that used on the main campus with additional feedback items specific to the delivery method and management employed in this non-traditional venue. These results and a review of course materials are considered by the Director in an annual review of all faculty members. The results of the annual review point to teaching effectiveness and may be considered in the promotion and tenure decisions and merit compensation evaluation of tenured and tenure-track faculty.

The evaluation results are also considered in making decisions concerning rehiring and/or reassigning of non-tenure track faculty.