EMERGENCY MANAGEMENT AND DISASTER SCIENCE

Emergency Management and Disaster Science offers a Bachelor of Science in Emergency Management as well as minors in Emergency Management, Fire Service Management, and Tribal Management and Emergency Services. The program also offers an undergraduate certificate in Tribal Management and Emergency Services. Emergency Management and Disaster Science was developed over a two year period by an interdisciplinary group composed of faculty from diverse University departments and programs, as well as community and public safety leaders in related professions. The program was approved in the summer of 2012. The curriculum developed is intended to provide an education that encompasses the broad array of knowledge and experience necessary to conduct emergency services and emergency administration, and to meet the demand for Emergency Management professionals at the federal, state, and local government levels, in the business community, and within the nonprofit organizations active in disasters.

The Mission of Emergency Management and Disaster Science is to:

- Develop student talents, wisdom, and experiences in a supportive yet demanding academic environment that prepares them for a personally rewarding successful professional career in Emergency Management.
- Initiate and lead superior research initiatives while supporting continuous improvements in efficiency, reliability, safety, and sustainability for provision of emergency services in the State of Nebraska and beyond.
- Foster cooperative relationships with neighboring communities, state and federal agencies, and private enterprise through collaborative education, training, and service projects that enhance performance and productivity.
- Set, preserve, and promote the utmost standards of honesty, integrity, and transparency through the teaching of and adherence to ethical conduct and open dialogue while ensuring good stewardship and management of program resources.

Emergency Management and Disaster Science is a division of the School of Public Administration in the College of Public Affairs and Community Service (CPACS).

Transfer Credit

Sixty-four credit hours from regionally accredited two-year institutions may be applied toward the degree. Twelve credit hours of American Council on Education (ACE) approved military credit may be applied toward electives in the BSEM degree. Credit from an institution that is not regionally accredited cannot be applied to the BSEM degree.

Fast Track

The School of Public Administration has developed a Fast-Track program for highly qualified and motivated students providing the opportunity to complete a bachelor’s degree and a master’s degree in an accelerated time frame. With Fast Track, students may count up to 9 graduate hours toward the completion of their undergraduate program as well as the graduate degree program.

Program Specifics:

- This program is available for undergraduate students pursuing the BS in Emergency Management desiring to pursue a MS in Urban Studies or the MPA degree.

- Students should have senior status (91 hours) and must be within at least 30 undergraduate credits yet to complete their undergraduate degree. Exceptional students who do not meet this requirement may be considered.
- Students must have a minimum undergraduate GPA of 3.5.
- Students must complete the Fast-Track Approval form and obtain all signatures and submit to the Office of Graduate Studies prior to first enrollment in a graduate course.
- Students will work with their undergraduate advisor and consult with the graduate advisor prior to enrollment in one of the courses listed below.
- A minimum cumulative GPA of 3.5 is required for graduate coursework to remain in good standing.
- Students remain undergraduates until they meet all the requirements for the undergraduate degree and are eligible for all rights and privileges granted undergraduate status including financial aid.
- Near the end of the undergraduate program, formal application to the graduate program is required. The application fee will be waived, the applicant will need to contact the Office of Graduate Studies for a fee waiver code.
  - Admission to Fast Track does NOT guarantee admission to the graduate program.
  - For this program, if students maintain at least a grade of B+ in courses taken, they will be recommended for admission to the MSUS or MPA program.
  - The admit term must be after the completion term of the undergraduate degree.

The following MS in Urban Studies courses may be taken under the Fast-Track program:

- UBNS 8000, Seminar in Urban Studies
- UBNS 8060, Introduction to Urban Planning
- UBNS 8020, Race, Ethnicity and American Urban Culture**
- UBNS 8200, Community Organizing and Development**
- PA 8010, The Public Economy (Must have completed or be concurrently enrolled in UBNS 8000)

The following MPA courses may be taken under the Fast-Track program:

- PA 8050, Foundations of Public Service
- PA 8090, Organizational Theory and Behavior
- PA 8100, Advanced Management and Leadership for Public and Nonprofit Organizations (Note: This course may only be taken if both PA 8050 and PA 8090 are completed).

Academic Advising

Academic Advising is provided for all students. The program recommends advising each semester to ensure degree completion. The academic advisor assists students with goal setting, degree planning, course scheduling, addressing any questions or concerns regarding major/minor, academic performance, and/or policies and procedures. The faculty in Emergency Management and Disaster Science are also available to speak with students regarding careers and mentoring. To contact an advisor, visit 114 CPACS, email unoemgt@unomaha.edu, or call 402.554.4900.

Student Group

Emergency Managers can work in many different industries including federal, state, county, and city governments, educational institutions, hospitals and public health agencies, nonprofits and community/ international relief organizations, private industry, transportation, the military, and many others.

- Disaster Recovery Manager
- Emergency Management Specialist
- Emergency Management Coordinator
- Emergency Preparedness Specialist
- Emergency Response Coordinator
- Emergency Services Director
- Safety Manager
- Public Information Officer

### Aviation Administration
- Federal Aviation Administration (FAA)
- Airport Security
- Commercial Aviation Companies
- Department of Transportation

### Criminology and Criminal Justice
- Law Enforcement Officer
- Federal Agencies such as the FBI, ATF, DIA, DHS, etc.
- Corrections
- Homeland Security Officer
- Security Director

### Fire Service Management
- City Firefighter
- Wildland Firefighter
- Command Level Supervisor
- Fire Prevention Specialist

### Geospatial Science
- Search and Rescue
- GIS Administrator, Analyst, Coordinator, or Manager
- Transportation Planner
- Data Collection for Drones

### Gerontology
- Public Policy and Education
- Hospitals, Nursing and Assisted Living Homes
- Housing and Home Modification
- Evacuation Specialist

### Information Technology and Communication
- Emergency Communication Specialist
- Information Security Analyst
- Information Security Director

### Intelligence and Security
- Intelligence Analyst
- State, Federal and Local Government: FBI, CIA, DIA, DHS
- Military Intelligence

### Logistics Management
- Logistics Engineer
- Transportation Manager
- Distribution Manager
- Transportation companies

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#### Contact
Emergency Management and Disaster Science is located in the College of Public Affairs and Community Service in room 114. The office can be reached by phone at 402.554.4900 or by email at unoemgt@unomaha.edu.

Website (https://www.unomaha.edu/college-of-public-affairs-and-community-service/emergency-services-program/)

### Admissions
Readmit students and students wishing to transfer from another institution or department within the University of Nebraska must have a 2.5 cumulative grade point average. Students with a GPA of 2.0 to 2.49 may be admitted to the Pre-Emergency Management program. Once students have achieved a 2.5 cumulative grade point average or better, they will be admitted to the BSEM program.

### Degrees Offered
- Emergency Management (BSEM), Bachelor of Science (http://catalog.unomaha.edu/undergraduate/college-public-affairs-community-service/emergency-services-program/emergency-management-bsem-ba/)

### Writing in the Discipline
The writing in the discipline courses for emergency management are:

- AVN 3060 Writing in Aviation
- CRCJ 3100 Writing for Criminal Justice
- CIST 3000 Advanced Composition for IS&T
- ENGL 2400 Advanced Composition
- ENGL 3050 Writing for the Workplace
- ENGL 3980 Technical Writing Across the Disciplines
- MKT 3200 Business Communications
- or a course approved by the Academic Advisor.

### Minors Offered

### Certificates Offered:

Emergency Management is the profession of individuals who focus on helping communities prior to, during, and following natural and manmade disasters to minimize risk and vulnerability. Emergency Managers plan and direct disaster response or crisis management activities, provide disaster preparedness training, and prepare emergency plans and procedures for natural (tornadoes, floods) and manmade (technological, terrorism) disasters, as well as public health epidemics. Our program meets the demand for professionals at the federal, state, and local levels, and the business community.
**Natural Disasters**
- Environmental Protection Specialist
- Urban/Regional Planner
- Soil and Water Conservationist

**Nonprofit Management**
- Volunteer Coordinator/Manager
- Community Development Planner/Director
- Grant/Fundraising Manager

**Planning and Preparing for Urban Hazards**
- Urban/Regional Planner
- Community Development Planner
- Housing Department Specialist

**Private Sector Management**
- Business Continuity Planner
- Emergency Preparedness Planner
- Media Communications Specialist

**Public Administration and Management**
- City, Urban and Regional Planning
- City/County Government
- Policy/Budget Analyst
- School/University Emergency Manager

**Public Health**
- Public Health Preparedness
- Community Health Education Specialist
- Biopreparedness Coordinator
- Public Health Specialist
- Hospital/Public Health Administrators
- Hospital Emergency Preparedness Coordinator

**Tribal Management and Emergency Services**
- Tribal Emergency Manager
- Tribal Government
- Tribal Law

**Unmanned Aircraft Systems (Drones)**
- Unmanned Aircraft Systems Pilot
- Unmanned Aircraft Systems Operator
- Unmanned Aircraft Systems Management

**EMGT 1000 INTRODUCTION TO EMERGENCY MANAGEMENT (3 credits)**
This course is an introduction to the National Response Framework (NRF) and the National Incident Management System (NIMS) and their influence on modern community Emergency Management and Homeland Security. The course conceptually introduces the four phases of Emergency Management: Mitigation, Preparedness, Response, and Recovery.

**EMGT 1150 INTRODUCTION TO TRIBAL MANAGEMENT AND EMERGENCY SERVICES (3 credits)**
This course is an introduction to how Tribal history and contemporary governance affect the delivery of emergency management services on Tribal lands as well as how the National Response Framework (NRF) and the National Incident Management System (NIMS) are integrated to provide emergency services. The course focuses on the challenges of implementing the five mission areas of Emergency Management: Mitigation, Preparedness, Prevention, Response, and Recovery for Native American Communities.

**Distribution:** Social Science General Education course and U.S. Diversity General Education course

**EMGT 2020 EMERGENCY MANAGEMENT STRATEGIES AND COMMUNICATION (3 credits)**
This course covers tactical issues, current communication methods, and critical information channels utilized during actual disaster and emergency management field operations. Topics include inter-agency linkages, command and control tactics, National Incident Management System and the Incident Command System, (NIMS-ICS) and other crucial management requirements for successful disaster planning, mitigation, and recovery operations.

**Prerequisite(s)/Corequisite(s):** EMGT 1000 or concurrent.

**EMGT 2050 POLITICAL AND LEGAL FOUNDATIONS IN EMERGENCY SERVICES (3 credits)**
The provision of Emergency Services in contemporary society occurs within an environment of legal requirements and community resource allocation that often requires difficult administrative and political decisions. Successful professionals who control, manage, and operate these services must understand and adhere to the demand and intent of the law. Also, they must master the practical art of politics related to the various community constituents and shareholders who fund and support them, staff them, and utilize them. This course examines the legal aspects and social consequences of emergency management provision. Environmental issues and Occupational Health and Safety policy and programs affecting emergency services are also examined.

**Prerequisite(s)/Corequisite(s):** EMGT 1000 or taken concurrently with EMGT 1000.

**EMGT 2060 FOUNDATIONAL INDIAN LAW & POLICY ISSUES (3 credits)**
This course provides an examination of the federal and tribal legal cases and policies that affect the delivery of critical services on tribal lands. The course will also examine how such case law and resulting policy affects current U.S./Tribal/State relationship, specifically in the area of sovereignty and regulatory jurisdiction of emergency management principles. The student will gain an understanding of the legal obligations of Tribal Government and the emergency manager with regard to disaster response within the legal context of tribal law and policy.

**Prerequisite(s)/Corequisite(s):** EMGT 1150 (can be taken currently with EMGT 1150 with instructor approval).

**EMGT 2500 DISASTERS AND VULNERABLE POPULATIONS (3 credits)**
This course is an introduction to the sociological examination of disasters. In the course students will learn about vulnerability in terms of social, economic, political, geographical and cultural factors. Students will investigate how vulnerable groups such as children, elderly, racial and ethnic minorities, and low income, are affected and cope before, during and after hazardous events. Other topics covered include: disaster warning responses, evacuation behavior, survival behavior, roles of volunteers, and disaster impacts.

**Distribution:** U.S. Diversity General Education course and Social Science General Education course
**EMGT 3020 FEDERAL/TRIBAL GOVERNMENT TO GOVERNMENT RELATIONS (3 credits)**

This course will introduce the Federal/Tribal government to government relationship that has evolved through U.S. Supreme Court case law; federal Indian policy; and through the Indian Self Determination and Education Assistance Act of 1975. Specifically, this course will focus on overcoming the challenges of implementing Emergency Management principles between the U.S. and Tribal governments by understanding how the government to government relationship works.

**Prerequisite(s)/Corequisite(s):** EMGT 1150; (can be taken currently with EMGT 1150 with instructor approval).

**EMGT 3040 PREPAREDNESS/PLANNING AND RISK MITIGATION (3 credits)**

 Provision of emergency and management of emergency services is dependent on extensive planning and preparedness. This process aids in the reduction of loss of property and life in extreme circumstances, even when confronted with a variety of environmental and politically motivated risks. An open society, which becomes ever more highly technological, demonstrates new sources of stress, complicated threats, and complex inter-relationships. Together, these factors present a significant challenge to those tasked with preventing and managing emergencies and disasters. This course provides a theoretical framework for the understanding of the ethical, sociological, organizational, political, and legal components of community risk analysis and mitigation, and a methodology for the development of comprehensive community risk preparedness planning.

**Prerequisite(s)/Corequisite(s):** EMGT 2020, EMGT 2050, PA 3000 / CRCJ 3000 or concurrent.

**EMGT 3080 AGENCY COLLABORATION DURING DISASTERS (3 credits)**

Federal, state, and local agency cooperation and interoperability in the provision of emergency management will be studied in this course. Federal, state, and local government authority and roles will be explored in concert with collaborative management programs. The origins of collaborative partnerships will be presented along with introduction of the Emergency Management Assistance Compact, development of volunteer networks, and formation of partnerships with the Citizen Corps, Community emergency Response Teams, the Medical Reserve Corps and Mercy Medical Airlift, and other groups that have the potential to contribute to the emergency management and response effort.

**Prerequisite(s)/Corequisite(s):** EMGT 2020, EMGT 2050, PA 3000 / CRCJ 3000 or concurrent.

**EMGT 4020 PROTECTING AND SUSTAINING TRIBAL ECONOMIES (3 credits)**

This course provides an understanding of unique tribal economies and how they operate under tribal law, constitutions and federal legislation, as well as an appreciation of how vulnerable tribal economies are to man-made and natural disasters. This course will also introduce Emergency Management principles and practices designed to assist tribal governments in protecting and sustaining their economies during crisis events.

**Prerequisite(s)/Corequisite(s):** EMGT 1150 Introduction to Tribal Management and Emergency Services

**EMGT 4050 INTEGRATION OF CONTEMPORARY ISSUES IN TRIBAL EMERGENCY MANAGEMENT (3 credits)**

This course covers application and integration of Tribal Management and Emergency Service (TMES) principles and practices, as well as contemporary issues affecting Tribal nations and their citizens; recent federal/tribal TMES legislation and case law; Federal/Tribal agency collaborative efforts; TMES Tribal Code development and implementation; and TMES funding resources such as PL 93-638 Contracts, grants and tribal taxation.

**Prerequisite(s)/Corequisite(s):** EMGT 1150

**EMGT 4060 DISASTER RESPONSE AND RECOVERY (3 credits)**

This course examines concepts and principles of: 1) community risk assessment, 2) disaster recovery planning, 3) responses specific to fires and natural and man-made disasters, 3) National Incident Management System and the Incident Command System (NIMS ICS), 4) mutual aid and automatic response, 5) training and preparedness, 6) communications, 7) civil disturbances, 8) terrorist threats/incidents, 9) hazardous materials planning, 10) mass casualty incidents, 11) earthquake preparedness, and 12) disaster mitigation and recovery.

**Prerequisite(s)/Corequisite(s):** EMGT 3040 (May be taken concurrently) or by instructor's permission

**EMGT 4200 INTERNSHIP IN EMERGENCY MANAGEMENT (3 credits)**

This course is designed to provide direct work experience in the emergency management field for selected students. This experience will be in a full-time or part-time, preferably paid position, in a highly structured environment. Student will be selected following formal job placement procedures and screening by Emergency Management Faculty and the participating organization. This course is intended for upper level, Emergency Management majors who have been selected following an application and interview process approved by both the School of Public Administration and the intern provider.

**Prerequisite(s)/Corequisite(s):** EMGT 3040, EMGT 3080, EMGT 4060; Instructor's Permission Required.

**EMGT 4800 SPECIAL READING IN EMERGENCY MANAGEMENT (3 credits)**

This course is intended for upper-level Emergency Management degree students who are pursuing advanced specialized areas of knowledge in Emergency Management. The course is conducted under an independent study format, and subject matter will vary based on the interests of the student. Learning outcomes objectives will be established by the instructor and shall remain consistent with Emergency Management curriculum goals. Faculty approval is required prior to registration.

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

**EMGT 4900 SPECIAL TOPICS IN EMERGENCY MANAGEMENT (3 credits)**

This course is meant to provide upper-level EMGT students with an in-depth look at current and future issues affecting the Emergency Management industry and industry professionals. Possible topics include disaster case studies, comparative international studies, issues in federalism, and Continuity of Operations (COOP). Subject matter will vary by student interest and by faculty preference. Students may repeat the course for additional academic credit as long as the course topic is not duplicated.

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

**EMGT 4990 CAPSTONE PROJECT IN EMERGENCY MANAGEMENT (3 credits)**

This course fulfills the Emergency Management Capstone senior project demonstrating expertise on a specific issue area and/or problem in emergency management. The student will be required to construct and execute a research project analyzing a contemporary operational, economic, or managerial issue within emergency management utilizing an appropriate research or analytical methodology. Both a written report and PowerPoint presentation will be presented as part of the course requirements.

**Prerequisite(s)/Corequisite(s):** EMGT 3040, EMGT 3080, EMGT 4060; Writing in the Discipline course; all with a C- or better; Instructor's Permission Required.
**FSMT 1600** **FUNDAMENTALS OF FIRE SCIENCE (3 credits)**
Fundamentals of Fire Science is an applied science which focuses on basic understanding of the chemical and physical nature of fire. Students will learn about common fire hazards, extinguishing agent properties, as well as fire ignition and growth phenomena.

**Distribution:** Natural/Physical Science General Education course

**FSMT 2200** **CODES AND INSPECTIONS (3 credits)**
Fire protection requirements, including zoning laws and primary access routes for flammable and explosive materials will be discussed. Major considerations and rationales employed in the formulation and creation of zoning and building codes are examined and understanding of local, state, and national codes are also introduced. Safety education program development and implementation, fire inspection techniques and fire investigation procedures are additionally covered.

**Prerequisite(s)/Corequisite(s):** EMGT 1000 or concurrent.

**FSMT 2300** **FIRE INVESTIGATION (3 credits)**
The origin and cause of fire and explosion incidents will be explored. Fire and arson investigation procedures such as on-site investigations and inspections, documentation, and fact gathering, collection of witness statements and canvassing, and procedures for gathering and storage of critical evidence will be presented. Legal and jurisdictional issues affecting fire investigation will also be discussed.

**Prerequisite(s)/Corequisite(s):** EMGT 1000 or concurrent

**FSMT 2310** **FIRE PROTECTION SYSTEMS (3 credits)**
A study of the procedures necessary to evaluate the firefighting requirements and how these needs drive the design and utilization of various types of fire protection equipment, including design of structural protection systems and associated construction materials, fire detection technology and fire suppression systems.

**Prerequisite(s)/Corequisite(s):** EMGT 1000 or concurrent

**FSMT 2410** **STRATEGIES AND TACTICS IN FIRE AND EMERGENCY SERVICES (3 credits)**
This course will provide examples of strategic and tactical considerations that members of the emergency services can employ during structure fires to include residential, commercial, high-rise, special hazard structures, and other types of emergencies like hazardous materials incidents, mass casualty emergencies, and technical rescues.

**Prerequisite(s)/Corequisite(s):** EMGT 1000

**FSMT 2510** **BUILDING CONSTRUCTION FOR THE FIRE SERVICE (3 credits)**
The visible and hidden dangers inherently involved with fighting structural fires are examined in this course. Characteristics of construction materials, construction types, fire protection systems, smoke development, fire containment, high rise construction and other topics relevant to firefighter life safety as related to building construction issues will be studied and evaluated.

**Prerequisite(s)/Corequisite(s):** EMGT 1000 or concurrent

**FSMT 3020** **FIRE DYNAMICS (3 credits)**
This course examines the underlying principles involved in structural fire protection systems, building furnishings, and fire protection systems including water-based fire suppression systems, fire alarm and detection systems, special hazard suppression systems, and smoke management systems.

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

**FSMT 3140** **FIRE RELATED HUMAN BEHAVIOR (3 credits)**
The goal of Fire Related Human Behavior is to provide students with knowledge about how humans respond to fire and how that knowledge has been integrated into life safety systems design and development.

**Prerequisite(s)/Corequisite(s):** FSMT 2200

**FSMT 3350** **FIRE PREVENTION, ORGANIZATION, AND MANAGEMENT (3 credits)**
This course examines the factors that shape fire risk and the tools for fire prevention, including risk education, codes and standards, inspection and plans review, fire investigation, research, master planning, various types of influences, and strategies.

**Prerequisite(s)/Corequisite(s):** FSMT 2200

**FSMT 3680** **ANALYTICAL APPROACHES TO PUBLIC FIRE PROTECTION (3 credits)**
This course examines rational decision making tools and techniques that can be used in Fire and Emergency Services agencies, including data collection, statistics, probability, decision analysis, utility modeling, resource allocation, and cost-benefit analysis.

**Prerequisite(s)/Corequisite(s):** FSMT 2200.

**FSMT 4300** **ADVANCED PRINCIPLES OF FIRE AND EMERGENCY SERVICES SAFETY AND SURVIVAL (3 credits)**
This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavioral change within the emergency services industry relating to safety, incorporating leadership, supervision, accountability, and personal responsibility. Instruction utilizes the lessons learned from case studies and other investigations that support cultural change throughout emergency services administration.

**Prerequisite(s)/Corequisite(s):** FSMT 2410.

**FSMT 4450** **FIRE AND EMERGENCY SERVICES ADMINISTRATION (3 credits)**
This course provides students with the knowledge to understand how to help the fire and emergency services administrator perform as an effective risk manager by recognizing legal and political issues affecting public safety, finding and applying appropriate legal rules and/or political constructs, and articulating supportable conclusions and recommendations.

**Prerequisite(s)/Corequisite(s):** FSMT 2410.

**FSMT 4800** **SPECIAL READINGS IN FIRE SERVICE MANAGEMENT (3 credits)**
This course is intended for upper-level Fire Service Management degree students who are pursuing specialized areas of knowledge in Fire Services. The course is conducted under an independent study format, and subject matter will vary based on the interests of the student and learning outcome objectives established by the instructor. Faculty approval is required prior to registration.

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

**FSMT 4860** **APPLICATIONS OF FIRE RESEARCH (3 credits)**
This course examines the basic principles of research and methodology for analyzing current fire-related research. The student will be able to understand the rationale that fire research organizations use for conducting fire-related research and evaluation.

**Prerequisite(s)/Corequisite(s):** FSMT 2410.

**FSMT 4900** **SPECIAL TOPICS IN FIRE SERVICE MANAGEMENT (3 credits)**
This course is meant to provide upper-level FSMT students with an in-depth look at current and future issues affecting the Fire Services industry and industry professionals. Possible topics include fire case studies, comparative international studies, issues in federalism, fire education, and fiscal administration. Subject matter will vary by student interest and by faculty preference. Students may repeat the course for additional academic credit as long as the course topic is not duplicated.

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