EMERGENCY MANAGEMENT AND DISASTER SCIENCE

The Emergency Management and Disaster Science Program 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.

The Emergency Management and Disaster Science Program 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 the Emergency Management and Disaster Science Program 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.

The Emergency Management and Disaster Science Program 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.

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 degree planning, course scheduling, addressing any questions or concerns regarding major/minor, academic performance, and/or policies and procedures. The faculty in the Emergency Management and Disaster Science Program are also available to speak with students regarding internships, careers, and mentoring. To contact an advisor, visit 112 CPACS, email unoemgt@unomaha.edu, or call 402.554.4900.

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.

Student Group


Contact

The Emergency Management and Disaster Science Program is located in the College of Public Affairs and Community Service in rooms 112 and 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-bs)

Minors Offered


Certificates Offered:


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.

Distribution: Social Science General Education course
EMGT 1150 INTRODUCTION TO TRIBAL EMERGENCY MANAGEMENT (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, Response, Recovery and Recovery for Native American Communities.

**Distribution:** U.S. Diversity General Education course and Social Science 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 stakeholders 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 concurrently 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 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): PA 3000 / CRCJ 3000; 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 outcome 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): PA 3000 / CRCJ 3000; 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 exploration and understanding of local, state and national codes are also introduced. Safety education program development and implementation, fire inspection techniques and fire investigation procedures are additionally covered.
Prerequisite(s)/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 many 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 reduction 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.