

Disaster Science

The Disaster Science major prepares students to understand, prevent, respond to, and recover from natural and human-caused disasters. Students study emergency management, hazard mitigation, risk assessment, disaster planning, public safety, and community resilience while developing leadership and decision-making skills for crisis situations. The major combines principles from emergency management, environmental science, public health, geography, and public administration to prepare graduates for careers that help organizations and communities prepare for, respond to, and recover from emergencies. Typical industry sectors include emergency management, government, healthcare, public safety, nonprofit organizations, environmental consulting, and homeland security.

Job Title Examples:

- Emergency Management Specialist
- Disaster Recovery Coordinator
- Emergency Preparedness Coordinator
- Hazard Mitigation Specialist
- Business Continuity Analyst
- Emergency Operations Planner
- Public Safety Specialist
- Risk Management Analyst
- Homeland Security Specialist
- Community Resilience Coordinator

Hard Skills:

1. Emergency Planning and Incident Management
2. Hazard and Risk Assessment
3. Geographic Information Systems (GIS)
4. Emergency Operations and Crisis Response
5. Data Collection and Situation Analysis

Soft Skills:

1. Leadership
2. Critical Thinking
3. Communication
4. Decision-Making Under Pressure
5. Teamwork and Collaboration

Further Education/Training Required and/or Suggested:

A BS in Disaster Science prepares students for entry-level careers in emergency management, disaster response, and public safety. Additional certifications and specialized training can improve employment opportunities and support career advancement.

To Enter the Field:

1. **FEMA Emergency Management Institute (EMI) Courses**
 - a. Free online training in the National Incident Management System (NIMS) and Incident Command System (ICS), commonly expected by employers in emergency management.
2. **Associate Emergency Manager (AEM)**
 - a. Offered by the International Association of Emergency Managers (IAEM) for professionals beginning a career in emergency management.

To Advance:

1. **Certified Emergency Manager (CEM)**
 - a. A nationally recognized credential for experienced emergency management professionals.
2. **Master's Degree** (e.g., *Emergency Management, Homeland Security, Public Administration, Public Health, or Environmental Science*)
 - a. Helpful for leadership, policy development, emergency planning, and specialized positions.
3. **Specialized Training** (e.g., *GIS, Business Continuity, Disaster Recovery, Public Health Preparedness*)
 - a. Enhances qualifications for technical and leadership roles.

Summary:

Professional certifications, FEMA training, and graduate education can strengthen career opportunities and prepare graduates for leadership roles in emergency management, disaster preparedness, and community resilience.

Professional or Student Associations:

- International Association of Emergency Managers (IAEM)
- National Emergency Management Association (NEMA)
- American Red Cross
- International Association of Emergency Managers – Student Chapter (*if available*)
- Kentucky Emergency Management Association (KEMA)