

February 13, 2025

To: House Committee on Government Operations and Military Affairs and the Senate Committee on Government Operations

From: Nolan Atkins, Vice President of Academic Affairs, Provost 

Re: Emergency and Disaster Management Program Proposal

This document contains a program proposal to address the following charge resulting from the 2024 Vermont legislative session given to the University of Vermont and Vermont State University (VTSU):

*On or before February 15, 2025, the President or designee for the Vermont State University and the President or designee for the University of Vermont shall each submit a written report to the House Committee on Government Operations and Military Affairs and the Senate Committee on Government Operations examining the creation of post-secondary disaster management programs, including the associated costs, projected enrollments, and aspects of curricula.*

Before presenting the proposal, this report will review related credentials available to the Vermont workforce. It will also present the individuals with expertise in this disciplinary area that were consulted in developing the proposal. And finally, it will present the proposed credentials with associated outcomes and courses along with the cost to develop and offer along with anticipated enrollments.

#### Related Credentials and Training Already Available

The proposed programs should complement what is already available in Vermont in this broad disciplinary area. These credentials include:

1. Master of Public Health offered by UVM.
2. Related FEMA and Vermont Emergency Management programs
  - a. [FEMA Emergency Management Profession](#)
  - b. [Vermont EMD certification](#)
3. Certificate in Paramedicine offered by VTSU

Saint Michaels College previously offered an Emergency Management Certificate but no longer does.

#### Expertise Consulted

In researching what a relevant emergency and disaster management program should be to best serve the needs of Vermont, the following three individuals were consulted:

1. Eric Forand, Director, Vermont Emergency Management

2. Nathan Pickard, Emergency Management Manager, Vermont State University
3. Laura Werner, Deputy Director – Division of Emergency Preparedness, Response and Injury Prevention
4. Inge Luce, MSN/Ed, RN-C, Paramedic, CEN, Professor of Nursing and Paramedicine  
Paramedic Program Director

Interviews with these individuals were especially helpful when trying to identify what programs outcomes would best serve the state, what type of credential would be most relevant and accessible, and what type of learners would engage in the program(s).

These conversations resulted in some important themes that inform the proposed program design. The program(s) should be available to a broad array of related incumbent workers who may or may not have a college degree. While the program should offer the requisite content in emergency and disaster management, soft skills such as communicating under pressure, leadership, working with a team, and others were deemed to be equally important. The program should also offer hands-on experiences in the form of an internship and a capstone experience that includes scenarios that would be encountered in Vermont. Technical skills in understanding data and ethical uses thereof along with GIS were also identified. And given the stressful nature of this work, the program should address wellness and self-care.

### Proposed Programs

Based on the program inputs discussed in the previous section, VSTU proposes the following array of programs. Two are new and one is a modification of an existing VTSU program. All three are credit-bearing programs.

## Certificate and Associate's degree in Emergency and Disaster Management

### *Certificate Program (15 credits)*

#### *Program Outcomes:*

1. **Foundational Knowledge of Emergency Management:** Graduates will have a solid understanding of the principles and practices of emergency management, including the historical context and evolution of the field.
2. **Community Resilience Building:** Graduates will be equipped with the skills to enhance the resilience of rural communities by fostering community awareness, engagement, and collaborative initiatives.
3. **Effective Emergency Response Coordination:** Graduates will be proficient in coordinating and managing emergency response efforts, demonstrating strong teamwork, leadership, and decision-making skills under pressure.

4. **Risk Assessment and Mitigation Skills:** Graduates will be adept at conducting comprehensive risk assessments and developing effective mitigation strategies, utilizing critical thinking and effective communication to address potential hazards in rural areas.
5. **Disaster Recovery and Rehabilitation Competence:** Graduates will have the knowledge and skills to facilitate post-disaster recovery and long-term rehabilitation processes, emphasizing leadership, collaboration, and effective communication to restore rural communities.

*Proposed Courses:*

1. **Introduction to Emergency Management 3cr**  
Provides a foundational understanding of emergency management principles and practices.
2. **Rural Community Resilience 3cr**  
Focuses on strategies for building and maintaining resilience in rural communities, emphasizing collaboration and community engagement.
3. **Emergency Response Operations 3cr**  
Covers the coordination and management of emergency response efforts, with an emphasis on teamwork and effective decision-making.
4. **Risk Assessment and Mitigation 3cr**  
Teaches techniques for identifying, evaluating, and mitigating risks in rural areas, highlighting critical thinking and communication skills.
5. **Disaster Recovery and Rehabilitation 3cr**  
Explores processes for post-disaster recovery and long-term rehabilitation, with a focus on leadership, collaboration, and effective communication.

All Certificate courses are three credits for a total of **15 credits**. The courses will be available online and will run in seven-week increments allowing a learner to complete it in one year. Notice that the courses cover an appropriate mix of relevant emergency and disaster related content and the soft skills identified in the interviews discussed in the previous section.

The certificate courses will also be required for the AS program in emergency and disaster management. Therefore, a learner can complete the AS program by taking an additional **seven courses**. The outcomes and courses for the AS degree program are as follows.

*Associate's Program in Emergency and Disaster Management (34-36 credits)*

*Program Outcomes:*

1. **Emergency Response Proficiency:** Graduates will demonstrate the ability to effectively coordinate and manage emergency response efforts in rural settings, utilizing both local resources and state/federal support. They will be skilled in deploying emergency protocols tailored to the specific needs of rural communities.
2. **Risk Assessment and Mitigation:** Students will be equipped to conduct comprehensive risk assessments for rural areas, identifying potential natural and man-made hazards. They will

develop and implement effective mitigation strategies to reduce the impact of disasters on rural populations and infrastructure.

3. **Community Resilience Building:** Graduates will possess the knowledge and skills to enhance the resilience of rural communities. This includes fostering community awareness, organizing training programs, and promoting collaborative initiatives between local government, non-profits, and residents to prepare for and respond to emergencies.
4. **Disaster Recovery and Rehabilitation:** Students will be trained in post-disaster recovery and rehabilitation processes, with a particular focus on rural communities. They will learn to facilitate the efficient restoration of essential services, support affected populations, and develop long-term recovery plans that take into account the unique challenges faced by rural areas.
5. **Technological Integration and Innovation:** Graduates will be adept at integrating technological tools and innovative solutions into emergency and disaster management practices. They will understand how to leverage technology for communication, resource management, and data analysis to improve emergency response and recovery efforts in rural contexts.

These outcomes are naturally similar to the certificate program, however, the Associate's degree also includes a focus on the data and technical tools that may be utilized along with applied learning experiences in the last semester of the program.

#### *Proposed Courses*

##### **Year 1 - Semester 1**

1. **Introduction to Emergency Management 3cr also requirement in certificate**
  - Overview of emergency management principles and practices, with a focus on developing problem-solving skills and adaptability to various emergency scenarios.
2. **Rural Community Resilience 3cr also requirement in certificate**
  - Exploration of resilience strategies tailored for rural communities, emphasizing collaboration, empathy, and community engagement to foster stronger, more connected communities.
3. **Risk Assessment and Mitigation 3cr also requirement in certificate**
  - Techniques for identifying, evaluating, and mitigating risks in rural areas, highlighting the importance of critical thinking and effective communication for successful risk management

##### **Year 1 - Semester 2**

1. **Emergency Response Operations 3cr also requirement in certificate**
  - Coordination and management of emergency response efforts, with an emphasis on teamwork, leadership, and effective decision-making under pressure.
2. **Disaster Psychology 3cr**
  - Examination of the psychological impact of disasters on individuals and communities, focusing on the importance of empathy, active listening, and providing mental health support.
3. **Technological Integration in Emergency Management 3cr**

- Use of technology in emergency preparedness, response, and recovery, highlighting adaptability and innovative thinking to leverage technological tools effectively.
- Use of GIS and related datasets

### Year 2 - Semester 1

1. **Disaster Recovery and Rehabilitation 3cr also requirement in certificate**
  - Processes for post-disaster recovery and long-term rehabilitation, emphasizing leadership, collaboration, and effective communication to restore rural communities.
2. **Emergency Planning and Preparedness 3cr**
  - Development and implementation of comprehensive emergency plans, focusing on strategic thinking, organizational skills, and the ability to communicate plans clearly to various stakeholders.
3. **Leadership and Ethics in Emergency Management 3cr**
  - Development of leadership skills and ethical decision-making in crisis situations, with a focus on integrity, accountability, and inspiring confidence in others during emergencies.

### Year 2 - Semester 2

1. **Advanced Risk Analysis and Crisis Management 3cr**
  - In-depth analysis of complex risks and advanced crisis management strategies, with an emphasis on teamwork, adaptability, and the ability to remain composed and decisive in high-pressure situations.
2. **Internship in Emergency Management 1-3 cr**
  - Practical, hands-on experience with a local emergency management agency or organization, focusing on the development of professional skills such as communication, teamwork, and adaptability in real-world settings.
3. **Capstone Project in Emergency and Disaster Management 3cr**
  - A comprehensive project addressing a current issue in rural emergency management. Students will engage in in-depth scenario reviews, analyzing past emergency situations and responses to identify best practices and areas for improvement. The course emphasizes critical thinking, project management, and the ability to effectively present and defend findings to faculty and peers.

All Associate's Program courses will be run online in seven-week sessions except for the internship and capstone courses. The capstone course will be run as a weekend-intensive course allowing student to gain valuable hand-on training with common scenarios experienced in Vermont. Students will also be required to complete the VTSU General Education requirements.

#### *Anticipated Costs*

The one-time costs for developing, implementing, and growing the certificate and Associate's programs in emergency and disaster management over a three-year period include the following:

Task	Personnel	Cost
<b>Course and program development</b>	One full-time faculty for 3 years	\$330,000
<b>Converting courses to online</b>	Instructional designer for two years	\$178,000
<b>Marketing support</b>		\$75k (\$25k per year)
<b>Total</b>		\$583,000

### *Anticipated enrollment*

Enrollment is anticipated to ramp up over three years to a steady state of about 30 students annually enrolled.

### *Associate's Program in Emergency Medical Services*

The third proposed program is a redesign of the existing Paramedicine certificate program offered by VTSU.

National Research and local Stakeholder input demonstrates that EMS providers are leaving the field due to poor leadership. Degree pathways are desired by employers and students. This redesign creates flexible pathways for providers entering at all levels of training and experience to develop leadership skills and earn an Associate of Science in Emergency Medical Services.

The paramedic certificate program can still stand alone for students not currently seeking a degree and it ladders into the AS program. The AS degree program will also be accessible to Advanced EMTs and current Paramedics, gaining leadership and communication skills and a broader knowledge of the EMS profession.

### *Program Outcomes:*

1. **Critical thinking and clinical judgment:** Graduates will integrate comprehensive situational data, problem-solving, and decision-making skills to arrive at the best plan of action to help an individual or the organization achieve its goals.
2. **Communication:** Graduates will demonstrate excellent written and spoken professional communication skills in person and digitally, incorporating empathy, cultural sensitivity, diversity awareness, and inclusive practices to cultural differences.
3. **Research and evidence:** Graduates will collect, analyze, and present evidence-based research with the intention of creating meaningful change, including the integration of legal and ethical standards into EMS leadership and management roles.
4. **Leadership:** Graduates will defend the use of situational leadership in EMS, collaboration within the professional and interdisciplinary fields, and participation in professional development



and practice committees. They will develop an understanding of their responsibilities as a leader and the importance of accountability.

5. **Technology and Artificial Intelligence:** Graduates will recognize and employ ethical use of technology including artificial intelligence in the workplace with the goal of improving processes and systems. They will utilize technology in a way that benefits the community, workforce, organization, and the EMS system.

*Program Courses for Paramedic prepared EMS AS degree program concentration (minimum 36 credits)*

1. **Medical terminology** **3cr**
  - Foundational knowledge of medical terminology to improve comprehension of science and EMS courses, documentation skills, and communication within the interdisciplinary team.
2. **Evidence-based practice** **3cr** *also in certificate*
  - Discussion and consideration of a variety of foundational topics related to EMS including current issues and trends in EMS, change and growth theories, introduction to research and professional writing, and oral presentations.
3. **Paramedic certificate courses** **27cr**
  - Current paramedic certificate coursework has been restructured to provide 15 credits per semester, rather than 12, decreasing the time it takes to complete the program.
4. **EMS Leadership** **3cr** *also in certificate*
  - Preparation for formal and informal leadership roles in EMS. Using a team-based learning style, students review policy, politics, crew resource management, communication, and conflict resolution skills and apply them to scenarios.

*Program Courses for AEMT prepared EMS AS degree program concentration (minimum 36 credits)*

1. **Medical terminology** **3cr**
  - Foundational knowledge of medical terminology to improve comprehension of science and EMS courses, documentation skills, and communication within the interdisciplinary team.
2. **Evidence-based practice** **3cr**
  - Discussion and consideration of a variety of foundational topics related to EMS including current issues and trends in EMS, change and growth theories, introduction to research and professional writing, and oral presentations.
3. **EMS Leadership** **3cr**
  - Preparation for formal and informal leadership roles in EMS. Using a team-based learning style, students review policy, politics, crew resource management, communication, and conflict resolution skills and apply them to scenarios.
4. **Emergency medical technician (EMT)** **6cr**
  - Basic life support provider prelicensure course prepares students to attend to the ill and injured in various medical settings.
5. **Advanced Emergency Medical Technician (AEMT)** **6cr**

- Entry-level advanced life support provider prelicensure course prepares students to attend to the ill and injured in various medical settings with enhanced knowledge, skills, and scope of practice.
6. **Elective coursework** **15cr**
- Students are encouraged to choose additional communication, business, and leadership courses already offered by the university to further develop their leadership skills while also achieving their personal goals.

#### *Anticipated Costs*

There are no anticipated costs above and beyond what VTSU carries to offer the certificate program to also deliver the AS in Emergency Medical Services.

#### *Anticipated Enrollment*

VTSU estimates the steady-state annual enrollment in this program to be 25-30 students.