

Safety Management, M.S.

Degree Offered

- Masters of Science, Safety Management (M.S.)

Masters of Science, Safety Management

The mission of the safety management program is to prepare program graduates to meet the safety mission of any enterprise. This is stated simply as: The safety mission of an organization is to protect, conserve, and improve the resources—people, property, and efficacy—of the organization. The Master's of Science with a major in Safety Management is accredited by the Applied and Natural Sciences Accreditation Commission (ANSAC) of ABET, <http://www.abet.org>.

Program Educational Objectives

Drawing from the university's mission, the program mission, the needs of our constituents, and the criteria of the Applied and Natural Sciences Accreditation Commission of ABET, the following educational objectives were developed for the Masters of Science program in Safety Management:

A graduate of the Safety Management program will be able to:

1. Communicate effectively, orally and in writing, including the transmission of safety data to management and employees.
2. Demonstrate knowledge and skills in the area of safety management.
3. Demonstrate knowledge of ethical and professional responsibilities and knowledge of applicable legislation and regulations.
4. Demonstrate the ability to apply various research activities through the decision-making process used in safety management.

Admissions for 2025-2026

MASTER ADMISSIONS

To be eligible for admission into the Master of Science in Safety Management degree program, a candidate must fulfill the following requirements:

- Official transcripts of all previous college course work
- A statement of purpose.
- ABET-ANSAC prerequisite course requirements:
 - sixty-three credit hours of approved science, mathematics, and other technical courses. Of these, at least fifteen credit hours must be junior or senior level.
 - twenty-one hours of social sciences, humanities, and/or communications.
 - Based on application review, additional requirements may be required on a case by case basis
- Applicants must have earned a GPA of 3.0 or better (out of a possible 4.0). Applicants with a cumulative GPA of less than 3.0 may be considered for admission if they have professional or other relevant experience
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/information-for/international-students/>).

Major Code: 3085

Curriculum in Masters of Science – Safety Management

A candidate for the M.S. degree with a major in safety management must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Industrial and Management Systems Engineering Department.

Program Requirements

All M.S. degree candidates are required to perform research (thesis or problem report option) and follow a planned program of study. The student's faculty advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

Students who do not hold a baccalaureate degree in safety management may be required to take a set of undergraduate courses above and beyond the minimum coursework requirements.

Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses		
Course Requirements *		
A minimum of 60% of courses must be from 500 level or above		
Plan of Study		
SAFM 501	Safety Management Integration	3
SAFM 502	Controlling Environmental and Personnel Hazards	3
SAFM 505	Safety Legislation and Compliance	3
SAFM 528	Economic Aspects of Safety	3
SAFM 534	Fire Safety Management	3
SAFM 550	Loss Control and Recovery	3
SAFM 552	Safety and Health Training	3
SAFM 640	Instrumentation for Safety Managers	3
SAFM 689	Professional Field Experience **	3
Electives		
Select three from the following:		9
SAFM 470	Managing Construction Safety	
SAFM 471	Motor Fleet Safety	
SAFM 533	Disaster Preparedness	
SAFM 539	Security Management	
SAFM 580	Fundamentals of Environmental Management	
OEHS 627	Physical Hazards Measurement and Control	
OEHS 528	Industrial Ventilation Design	
OEHS 725	Industrial Hygiene Sampling and Analysis	
IENG 561	Industrial Hygiene Engineering	
IENG 564	Industrial Ergonomics	
IENG 660	Human Factors System Design	
IENG 662	Systems Safety Engineering	
ESWS 515	Hazardous Waste Training	
ESWS 515L	Hazardous Waste Training Laboratory	
ESWS 555	Environmental Sampling and Analysis	
MINE 471	Mine and Safety Management	
RESM 440	Foundations of Applied Geographic Information Systems	
RESM 440L	Foundations of Applied Geographic Information Systems Laboratory	
RESM 480	Environmental Regulation	
OEHS 601	Environmental Health	
OEHS 520	Industrial Hygiene	
OEHS 622	Public Health Toxicology	
OEHS 623	Occupational Injury Prevention	
OEHS 630	Public Health Biology	
OEHS 665	Worksite Evaluation	
SBHS 601	Social and Behavioral Theory	
FIN 455	Risk Management	
CHPR 614	Injury Prevention and Control	
Any BIOS, EPID, IENG (except IENG 461), IH&S, OEHS, PUBH, SAFM, SBHS course 400-795, as approved by the student's AEC		
Choose 1 of the following options: ***		0-6
Thesis Option - 6 hours		
SAFM 697	Research (6 hours)	
Final Oral or Written Examination		
Thesis		
Problem Report Option - 3 hours		

SAFM 697	Research (3 hours)	
Final Oral or Written Examination		
Formal written report or professional report/paper		
Coursework Option		
Final Oral or Written Examination		
Total Hours		36-42

* Students who do not hold a baccalaureate degree in safety management may be required to take a set of undergraduate courses above and beyond the minimum coursework requirements.

** Students who have SHE work experience have the possibility to waive SAFM 689 and take an additional elective, please see your advisor for approval.

*** Credit hours may vary depending on option selected. The coursework option requires 36 hours.

Final Examination

M.S. students following the thesis or problem report option must prepare a written research proposal. The proposal must be approved by the student's AEC at least one semester prior to the final oral examination.

All students, regardless of option, are required to pass a final oral or written examination, administered by their AEC, covering the thesis or problem report and/or related course material.

Suggested Plan of Study

The plan below illustrates the Coursework Option. It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical M.S. degree program that completes degree requirements in one and half years is as follows.

First Year					
Fall	Hours	Spring	Hours	Summer	Hours
SAFM 501		3 SAFM 528		3 SAFM 689	3
SAFM 502		3 SAFM 640		3	
SAFM 505		3 SAFM 550		3	
Elective		3 Elective		3	
		12			3
12					
Second Year					
Fall	Hours				
SAFM 552		3			
SAFM 534		3			
Elective		3			
		9			
9					

Total credit hours: 36

Student Outcomes

SAFETY MANAGEMENT

In order to meet Program Educational Objectives of the Safety Management program, students must be able to meet the following outcomes at the time of their graduation:

1. mathematics and science and/or technical topics to areas relevant to safety management.
2. An ability to formulate or design a system, process, procedure or program to meet desired needs.
3. An ability to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions.
4. An ability to communicate effectively with a range of audiences.
5. An ability to understand ethical and professional responsibilities and the impact of technical and/or scientific solutions in global, economic, environmental, and societal contexts.
6. An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.