

SAFETY, M.S.

Program Description

No human endeavor or undertaking can be done without involving the field of safety technology. Safety professionals work in a variety of situations alongside management to ensure the health and safety of all employees. The graduate curriculum in Safety offers two areas of emphasis: Mine Safety and Occupational Safety and Health. The Master of Science degree has a 36 semester credit-hour requirement (18 CR of the 36 CR should be with courses at the 600 level).

Admission Requirements

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at www.marshall.edu/graduate/admissions/how-to-apply-for-admission (<http://www.marshall.edu/graduate/admissions/how-to-apply-for-admission/>).




In addition:

Each applicant for admission must have an undergraduate degree from an accredited college or university, and must satisfy at least **one** of the following criteria:

- Score at the mean or above on the verbal GRE
- Score at the mean or above on the quantitative GRE
- Score at the mean or above on the analytical GRE
- Score at the mean or above on the Miller Analogies Test
- Have an undergraduate GPA of 2.50 or above
- Have passed the Fundamentals of Engineering exam and/or the Professional Engineering exam

In addition to the general requirements all students entering the graduate Safety program must have completed prior to admission the following courses **or** their equivalent:

- For the Area of Emphasis in Occupational Safety and Health:

Code	Title	Credit Hours
MTH 130 	College Algebra	3
PHY 101 	Conceptual Physics	3
PHY 101L 	Conceptual Physics Lab	1
CHM 205	General, Organic, and Biochem	3

Area of Emphasis in Mine Safety

The Mine Safety graduate program is offered in cooperation with the National Mine Safety and Health Academy (MSHA), Beckley, WV. The program is designed for underground and surface mining and is applicable to all aspects of the metallic and non-metallic mining industry. Typically students are MSHA employees and have five or more years experience in the mining industry; a technical background is required. A limited number of non-MSHA employees are permitted into the program; preference will be given to those with mining experience. The Division Chair of Applied Science Technology grants permission for admission to this area of emphasis. Only students admitted to Mine Safety will be eligible to take courses. Please contact the Division Chair for further information prior to applying for admission to this program.

Plan of Study

Area of Emphasis in Occupational Safety and Health

Code	Title	Credit Hours
Core Courses		
SFT 599	Dev & Mgt of Occup Safety Prog	3
SFT 610	Intro to Prof Safety & Health	3
SFT 630	Current Lit & Res in Safety	3
Required Courses		
SFT 540	Indust Fire Protection	3
SFT 554	Indust Hygiene I	3
SFT 597	Occup Sft & Health Prog Dev	3
SFT 645	Saf Engineering Equip Design	3
SFT 660	Appl Ergon and Hum Factors Eng	3
SFT 647L	Quan Indus Hygiene Lab	3
Total Credit Hours		27

Students may choose to complete either the project option or thesis option after consultation with their academic advisor.

Thesis Option

The thesis option involves completion of 3 CR from any 600-level, safety-related elective courses, and 6 CR of research (SFT 681 Thesis) under the direction of an advisor. The student must prepare a formal thesis proposal (including a statement of work, extensive literature search, and proposed timeline) in consultation with his or her advisor and present the proposal to the graduate thesis committee, which is formed in consultation with the advisor. The thesis proposal must be defended and approved by the thesis committee prior to the final semester of study (typically completed during the first semester of SFT 681 Thesis). Students must then summarize their research work in the form of a formal, written thesis and successfully defend it before their thesis committee in order to fulfill the requirements for the degree (typically completed during the second semester of SFT 681 Thesis). Thesis work is typically conducted over two semesters.

Project Option

The project option involves completion of 6 CR from any 600-level, safety-related elective courses and complete 3 CR of comprehensive project (SFT 679 Problem Report). The comprehensive project involves the application coursework completed as part of the degree to a practical problem. Students will work their advisors to identify an appropriate project and scope. Students must prepare a formal written report and deliver an oral presentation to a committee. Students register for SFT 679 Problem Report (3 CR) during the semester in which their project completed and presented, but preliminary work on the project may commence before that semester.