Safety Management

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 Applied Science Accreditation Commission Criteria 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.

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 industrial hygiene
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.

Admissions

To qualify as a regular graduate student, applicants must have as a minimum the equivalent of a 3.0 GPA. Applicants with a minimum 2.75 GPA (or the equivalent) may be admitted on a provisional basis. Applicants with GPA below 2.75 would need approval of the dean or his designee. International students must demonstrate proficiency in communicating in English (a minimum TOEFL Score of 550, or IBT Score of 79, or IELTS Score of 6.5). Students must comply with the rules and regulations as outlined in this catalog for graduate work in the College of Engineering and Mineral Resources and meet individual major and degree admission standards.

Applicants to graduate programs in the IMSE department are required to provide the following.

• A completed application submitted to the WVU Admissions Office
• Official transcripts of all previous college course work
• TOEFL scores for international students as stated above
• GRE General Test scores (not required for the M.S. in Safety Management Program)
• Three letters of recommendation (required for the Ph.D. programs only).

For admission into the M.S. Safety Management Program, applicants must meet department admission standards and ABET/ASAC prerequisite course requirements, which are currently a minimum of 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. In addition, students must have a minimum of twenty-one hours of social sciences, humanities, and/or communications. On an individual basis, the faculty may identify additional prerequisite coursework. Applicants will be advised about their specific requirements at the time of admission. Applicants not meeting all of the listed requirements may be considered for admission as provisional students.
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

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

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SAFM 501</td>
<td>Safety Management Integration</td>
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<td>SAFM 502</td>
<td>Controlling Environmental and Personnel Hazards</td>
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<td>SAFM 505</td>
<td>Safety Legislation and Compliance</td>
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<td>Economic Aspects of Safety</td>
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<td>SAFM 550</td>
<td>Loss Control and Recovery</td>
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<td>SAFM 552</td>
<td>Safety and Health Training</td>
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<td>SAFM 640</td>
<td>Instrumentation for Safety Managers</td>
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<td>SAFM 689</td>
<td>Professional Field Experience</td>
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<td>Managing Construction Safety</td>
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<td>FIN 455</td>
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Electives

Select three from the following: 9

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CHPR 614  Injury Prevention and Control
Any IH, IENG, OEHS, EDIP, SAFM, SHBS, or PUBH courses 400-799
Choose 1 of the following options:***

**Thesis Option - 6 hours**
SAFM 697  Research (6 hours)
Written Research Proposal
Thesis
Final Oral or Written Examination

**Problem Report Option - 3 hours**
SAFM 697  Research (3 hours)
Written Research Proposal
Formal written report or professional report/paper
Final Oral or Written Examination

**Coursework Option**
Final Oral or Written Examination

Total Hours: 36

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* 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**

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<tr>
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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<th>Summer</th>
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**Second Year**

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<th>Fall</th>
<th>Hours</th>
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Total credit hours: 36

**Student Outcomes**

**SAFETY MANAGEMENT**
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