Occupational Safety and Health, Ph.D.

Degree Offered

- Doctor of Philosophy, Occupational Safety and Health (Ph.D.)

Nature of the Program

The online Occupational Safety and Health Ph.D. program is designed for students and professionals who aspire to advance their knowledge, research potential and overall expertise to explore research and development opportunities in academia, consulting or high-level industry positions. The program equips students with the skills necessary to tackle complex occupational safety and health challenges by seamlessly integrating structured coursework with applied research. The flexible, self-paced online curriculum allows students to balance their professional commitments while pursuing their doctoral degrees. The program's industry-focused curriculum addresses the growing demand for doctoral-level expertise in high-risk sectors such as healthcare, fire safety, construction, and more.

Admissions for 2025-2026

DOCTORAL ADMISSIONS

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- A bachelors and masters degree from engineering, physics, chemistry, computer sciences, mathematics, or a similar technical or science program. The applicant must have completed at least two years of calculus or equivalent mathematics in their degree program.
- Earned a GPA of 3.0 or better (out of a possible 4.0) in their undergraduate and graduate coursework. Applicants with a cumulative GPA of less than 3.0/4.0 may be considered for admission if they have professional or other relevant experience.
- A statement of purpose.
- Two letters of recommendation
- Official transcripts of all previous college course work
- While not required for admission, all applicants seeking fellowship and departmental funding must submit GRE scores.
- International applicants must meet the WVU requirement of English language proficiency (https://graduateadmissions.wvu.edu/information-for/international-students/).

DIRECT-TRACK BS-PHD ADMISSIONS

The Department of Industrial and Management Systems Engineering offers a direct track option from the bachelor of science (B.S.) to the doctor of philosophy (Ph.D.) degree for prospective qualified students with exceptional academic record and/or professional experience. The qualified students must hold a B.S. degree in engineering, physics, chemistry, computer sciences, mathematics, or a similar technical or science program. In general, a degree in one of the related science programs is required with at least two years of calculus or equivalent mathematics. This is an accelerated track that provides outstanding candidates the option of earning a Ph.D. degree in less than five years after graduating from an undergraduate program by engaging early in their Ph.D. dissertation research. To qualify for the direct- track degree option, all applicants must have:

- Applicants must have earned a GPA of 3.2 or better (out of a possible 4.0) in their undergraduate
- A statement of purpose
- Two letters of recommendation
- Official transcripts of all previous college course work
- While not required for admission, all applicants seeking fellowship and departmental funding must submit GRE scores.
- International applicants must meet the WVU requirement of English language proficiency (https://graduateadmissions.wvu.edu/information-for/international-students/).

Major Code: 3073

Curriculum in Doctor of Philosophy – Occupational Safety and Health

A candidate for the Ph.D. degree with a major in occupational safety and health 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

The doctor of philosophy degree with a major in occupational safety and health is administered through the college’s interdisciplinary Ph.D. program. The research work for the doctoral dissertation must show a high degree of originality on the part of the student and must constitute an original contribution to the art and science of occupational safety and health.

All Ph.D. degree candidates are required to perform research and follow a planned program of study. The student's research 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.

Required core courses for the Ph.D. program are determined by the student's area of emphasis. The research work for the doctoral dissertation may entail a fundamental investigation or a broad and comprehensive investigation into an area of specialization.

Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses		
Course Requirements		
Research		24
SAFM 797	Research	
Select from the following based on degree path:		18
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, IH&S, MAE, MATH, MINE, PCOL, PNGE, PHYS, PUBH, SAFM, SENG, or STAT courses 500-795, as approved by the student's AEC		
Examinations		
Plan of Study		
Qualifying Exam		
Candidacy Exam		
Final Exam		
Dissertation		
Total Hours		42

Examinations

QUALIFYING EXAM

All students must take and pass a qualifying examination. Normally, the qualifying examination is given no later than one semester after completion of eighteen credit hours toward the doctoral degree. This examination is designed to assess the basic competency of students in the occupational safety and health field to determine whether or not they have sufficient knowledge to undertake independent research.

CANDIDACY EXAMINATION

In order to be admitted to candidacy, the student must pass a candidacy exam, which is designed to evaluate the student's overall ability to engage in high-level research.

A student who has successfully completed all coursework, passed the qualifying examination, and successfully defended the research proposal is defined as one who is a candidate for the Ph.D. degree.

FINAL EXAMINATION

At the completion of the dissertation research, candidates must prepare a dissertation and pass the final oral examination (defense) administered by their AEC.

In order to complete the Ph.D. requirements, a student must pass a final oral examination on the results embodied in the dissertation. This examination is open to the public and, in order to evaluate critically the student's competency, may include testing on material in related fields, as deemed necessary by the AEC. In addition, since the Ph.D. degree is primarily a research degree that embodies the results of an original research proposal and represents a significant contribution to scientific literature, the student must submit a manuscript on this research to the AEC.

Major Learning Outcomes

OCCUPATIONAL SAFETY AND HEALTH

1. To construct, manage, and evaluate a comprehensive safety and health program for large industry or government agencies.
2. To participate in the safety and health regulatory process as an individual or part of a corporation or university.
3. To critically evaluate research conducted by other individuals or corporations in occupational safety and health.
4. To provide excellent teaching at the University or corporate levels.
5. To participate in activities such as conferences or seminars for continued professional improvement.

6. To actively participate as a leader in the professional organizations that serve the occupational safety and health fields.
7. To demonstrate the highest possible ethical standards in the field of occupational safety and health.