M.S. in Occupational Safety and Health Engineering

Degree Requirements
A minimum of 36 credits is required.

Students who lack an appropriate background may be admitted and required to make up deficiencies by taking a program of bridge courses that is designed in consultation with graduate advisors. These courses are taken in addition to the degree requirements and may include undergraduate courses.

Seminar: In addition to the minimum 36 degree credits required, all students who receive departmental or research-based awards must enroll each semester in IE 791 Graduate Seminar.

M.S. in Occupational Safety and Health (courses only)

Required Courses
- EM 633 Legal Aspects of Health and Safety 3
- IE 604 Advanced Engineering Statistics 3
- IE 614 Safety Engineering Methods 3
- IE 615 Industrial Hygiene and Occupational Health 3
- IE 665 Applied Industrial Ergonomics 3
- IE 685 Systems Safety 3

Elective Courses
Select six of the following: 18
- BME 670 Introduction to Biomechanical Engineering
- BME 671 Biomechanics of Human Structure and Motion
- EVSC 603 Hazardous Waste Operations and Emergency Response
- EVSC 614 Quantitative Environmental Risk Assessment
- EVSC 616 Toxicology for Engineers and Scientists
- IE 608 Product Liability Control
- IE 661 Man-Machine Systems
- IE 662 Cognitive Engineering
- IE 664 Advanced Ergonomics
- IE 669 Human Design Factors in Engineering
- IE 675 Safety in Facility and Product Design
- IE 681 Interdisciplinary Seminar in Occupational Safety and Health
- IE 682 Industrial Safety and Health Evaluation
- IE 700 Master's Project
- IE 725 Independent Research
- ME 660 Noise Control

Total Credits 36

M.S. in Occupational Safety and Health (Master's thesis)

Required Courses
- EM 633 Legal Aspects of Health and Safety 3
- IE 604 Advanced Engineering Statistics 3
- IE 614 Safety Engineering Methods 3
- IE 615 Industrial Hygiene and Occupational Health 3
- IE 665 Applied Industrial Ergonomics 3
- IE 685 Systems Safety 3
- IE 701 Master's Project 6

Elective Courses
Select four of the following:  

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**Total Credits**: 36  

1 Required for NIOSH trainees; optional for all others.