

M.S. in Occupational Safety Management

At the **Daytona Beach Campus**, the Master of Science in Occupational Safety Management provides students with the theoretical foundation, research and application skills required to effectively prevent and control workplace safety, health and environmental hazards and manage comprehensive occupational safety and health programs.

Studying on the Daytona Beach, Florida campus gives students direct access to safety labs, aviation maintenance facilities and real-world operational settings where they can practice hazard assessment and risk mitigation. The campus's close-knit community and industry events also make it easy to build mentorships and professional networks with faculty and visiting safety leaders.

The program offers a focused track in Industrial Hygiene — the science of anticipating, recognizing and controlling workplace environmental hazards.

To tailor the experience to individual interests and needs, students can choose to complete a thesis, a graduate capstone or participate in an internship for academic credit. A total of 36 credits are required for students completing a thesis, and 33 credits are required for those completing the capstone.

At the **Worldwide Campus**, Embry-Riddle's Master of Science in Occupational Safety Management is offered 100% online, giving students across the globe access to a flexible, high-quality education in workplace safety and health. The program prepares students to lead safety initiatives, develop and implement best practices and build proactive, inclusive safety cultures across a wide range of industries. Students gain the analytical and communication skills needed to identify and manage hazards and stay ahead of evolving industry trends and technologies.

Master of Science in Occupational Safety Management coursework prepares students for certification by the Board of Certified Safety Professionals, allowing them to apply for the Graduate Safety Practitioner® (GSP)* designation — a streamlined step toward the Certified Safety Professional® (CSP) credential.

The benefits of the GSP designation are:

- Recognition for being on a path toward the CSP certification
- Recognition for the level of preparation for professional safety practice
- A waiver of the ASP examination requirement for CSP
- A certificate awarding the GSP designation

For more details, visit bcsp.org/GSP (<https://catalog.erau.edu/programs/graduate/masters/occupational-safety-management/bcsp.org/GSP/>).

The graduate degree in Occupational Safety Management is approved by the Institute of Hazardous Materials Management as an Associate Safety and Health Manager (ASHM) program. Students may apply for the ASHM credential upon completion of the program — an important milestone on the path to earning the accredited Certified Safety and Health Manager (CSHM) certification. Students who receive a degree from an approved ASHM institution need only two years of professional experience, rather than four, to qualify for the CSHM exam.

Professional Accreditation

The Master of Science in Occupational Safety Management program is accredited by the ANSAC Accreditation Commission of ABET under the commission's General Criteria and Program Criteria for Safety and Similarly Named Programs.

Program-Level Student Learning Outcomes

Daytona Beach

Students will:

- Conduct accident investigations and analyses.
- Apply adult learning theory to safety training methodology.
- Apply principles of safety and health in a non-academic setting through an intern, cooperative, or supervised experience.
- Apply sampling, measurement methods, and control technologies to physical, chemical, and biological contaminant exposure risks.
- Demonstrate mastery of subject matter with high level oral and written communication skills.
- Demonstrate how to anticipate, recognize, evaluate, prevent and control strategies for hazardous conditions and work practices.
- Evaluate safety, health, and/or environmental programs of their design.
- Demonstrate the fundamental aspects of safety, industrial hygiene, environmental science, fire science, hazardous materials, emergency management, ergonomics and/or human factors.
- Apply relevant standards, regulations, and codes.

Worldwide

Students will:

- Have the ability to identify, formulate, and solve broadly-defined technical or scientific problems by applying knowledge of mathematics and science and/or technical topics to areas relevant to the discipline.
- Have the ability to formulate or design a system, process, procedure, or program to meet desired needs.
- Have the ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.
- Have the ability to anticipate, recognize, evaluate, prevent, and control workplace safety and occupational health hazards within numerous industries to protect people, property, the environment, and organizational operations.
- Have an ability to effectively manage the occupational safety and health function within a variety of industries.
- Have an ability to justify occupational safety and health programs, initiatives and control efforts through the use of business and risk management metrics by maintaining compliance with applicable standards and regulations or through scientific evaluation of outcomes.
- Have an ability to effectively communicate and interact with persons at all levels within an organization and externally about occupational safety, health, and environmental management.
- Have the ability to practice and perform in an ethical, moral, responsible, and accountable manner in all aspects, but especially in the practice of safety, understanding the impact of technical and/or scientific solutions in global, economic, environmental, and societal contexts.
- Have the ability to identify an occupational safety and health research problem; complete a thorough review of the scholarly literature; formulate and test hypotheses or research questions; collect and appropriately analyze qualitative or quantitative data; and interpret and report research findings using scientific judgement to improve the field of occupational safety and health or to provide solutions to an occupational safety and health problem.

Daytona Beach Program Requirements

Core Requirements	24
Program Support Courses	6
Option	3-6
Total Credits	33-36

Core Requirements

Choose Option I or Option II for Core Requirements.

Option I

SFTY 520	Occupational Health and Safety Foundations	3
SFTY 530	Safety, Health and Environmental Legislation, Litigation and Compliance	3
SFTY 550	Fire Safety Management and Disaster Response	3
SFTY 580	Environmental Protection for the Safety, Health and Environmental Manager	3
SFTY 590	Hazard Control Methods in Occupational Safety and Health	3
SFTY 600	Occupational Safety and Health Management	3
SFTY 611	Industrial Hygiene and Toxicology	3
SFTY 619	Human Factors and Ergonomics	3
Total Credits		24

Option II: Industrial Hygiene Area of Concentration Core

SFTY 520	Occupational Health and Safety Foundations	3
SFTY 530	Safety, Health and Environmental Legislation, Litigation and Compliance	3
SFTY 560	Industrial Hygiene and Physical Hazards	3
SFTY 590	Hazard Control Methods in Occupational Safety and Health	3
SFTY 611	Industrial Hygiene and Toxicology	3
SFTY 619	Human Factors and Ergonomics	3
SFTY 620	Evaluation of Chemical Hazards and Analytical Methods in Industrial Hygiene	3
SFTY 640	Industrial Hygiene Sampling and Analysis	3
Total Credits		24

Program Support Courses

MSAV 662	Statistical Analysis for Aviation/Aerospace	3
MSAV 670	Research Methods in Aviation/Aerospace	3
Total Credits		6

Option

Option I: Capstone Option

SFTY 691	Capstone	3
Total Credits		3

Option II: Thesis Option

SFTY 700A	Graduate Thesis I	3
SFTY 700B	Graduate Thesis II	3
Total Credits		6

Suggested Plan of Study

Management Track - Non Thesis Option

Year One

Requirements	Credits
SFTY 611 - Industrial Hygiene and Toxicology	3
SFTY 530 - Safety, Health and Environmental Legislation, Litigation and Compliance	3

MSAV 662 - Statistical Analysis for Aviation/Aerospace	3
Semester Hours	9

Requirements	Credits
SFTY 580 - Environmental Protection for the Safety, Health and Environmental Manager	3
SFTY 550 - Fire Safety Management and Disaster Response	3
MSAV 670 - Research Methods in Aviation/Aerospace	3
Semester Hours	9

Total Credits

Total Hours for All Requirements: 18

Year Two

Requirements	Credits
SFTY 590 - Hazard Control Methods in Occupational Safety and Health	3
SFTY 600 - Occupational Safety and Health Management	3
SFTY 619 - Human Factors and Ergonomics	3
Semester Hours	9

Requirements	Credits
SFTY 691 - Capstone*	3
Semester Hours	3

Requirements	Credits
SFTY 520 - Occupational Health and Safety Foundations	3
Semester Hours	3

Total Credits

Total Hours for All Requirements: 15

* An internship can be completed in lieu of a course.

Management Track - Thesis Option

Year One

Requirements	Credits
SFTY 611 - Industrial Hygiene and Toxicology	3
SFTY 530 - Safety, Health and Environmental Legislation, Litigation and Compliance	3
MSAV 662 - Statistical Analysis for Aviation/Aerospace	3
Semester Hours	9

Requirements	Credits
SFTY 580 - Environmental Protection for the Safety, Health and Environmental Manager	3
SFTY 550 - Fire Safety Management and Disaster Response	3

MSAV 670 - Research Methods in Aviation/Aerospace	3
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Semester Hours	9
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Total Credits

Total Hours for All Requirements: 18

Year Two

Requirements	Credits
SFTY 590 - Hazard Control Methods in Occupational Safety and Health	3
SFTY 600 - Occupational Safety and Health Management	3
SFTY 700A - Graduate Thesis I	3
Semester Hours	9

Requirements	Credits
SFTY 619 - Human Factors and Ergonomics	3
SFTY 700B - Graduate Thesis II	3
Semester Hours	6

Requirements	Credits
SFTY 520 - Occupational Health and Safety Foundations	3
Semester Hours	3

Total Credits

Total Hours for All Requirements: 18

Industrial Hygiene Track - Non-Thesis Option

Year One

Requirements	Credits
SFTY 611 - Industrial Hygiene and Toxicology	3
SFTY 530 - Safety, Health and Environmental Legislation, Litigation and Compliance	3
MSAV 662 - Statistical Analysis for Aviation/Aerospace	3
Semester Hours	9

Requirements	Credits
SFTY 560 - Industrial Hygiene and Physical Hazards	3
SFTY 620 - Evaluation of Chemical Hazards and Analytical Methods in Industrial Hygiene	3
MSAV 670 - Research Methods in Aviation/Aerospace	3
Semester Hours	9

Total Credits

Total Hours for All Requirements: 18

Year Two

Requirements	Credits
SFTY 590 - Hazard Control Methods in Occupational Safety and Health	3
SFTY 640 - Industrial Hygiene Sampling and Analysis	3

SFTY 619 - Human Factors and Ergonomics	3
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Semester Hours	9
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Requirements	Credits
SFTY 691 - Capstone *	3
Semester Hours	3

Requirements	Credits
SFTY 520 - Occupational Health and Safety Foundations	3
Semester Hours	3

Total Credits

Total Hours for All Requirements: 15

* An internship can be completed in lieu of a course.

Industrial Hygiene Track - Thesis Option

Year One

Requirements	Credits
SFTY 611 - Industrial Hygiene and Toxicology	3
SFTY 530 - Safety, Health and Environmental Legislation, Litigation and Compliance	3
MSAV 662 - Statistical Analysis for Aviation/Aerospace	3
Semester Hours	9

Requirements	Credits
SFTY 560 - Industrial Hygiene and Physical Hazards	3
SFTY 620 - Evaluation of Chemical Hazards and Analytical Methods in Industrial Hygiene	3
MSAV 670 - Research Methods in Aviation/Aerospace	3
Semester Hours	9

Total Credits

Total Hours for All Requirements: 18

Year Two

Requirements	Credits
SFTY 590 - Hazard Control Methods in Occupational Safety and Health	3
SFTY 640 - Industrial Hygiene Sampling and Analysis	3
SFTY 700A - Graduate Thesis I	3
Semester Hours	9

Requirements	Credits
SFTY 619 - Human Factors and Ergonomics	3
SFTY 700B - Graduate Thesis II	3
Semester Hours	6

Requirements	Credits
SFTY 520 - Occupational Health and Safety Foundations	3
Semester Hours	3

Total Credits

Total Hours for All Requirements: 18

Worldwide Program Requirements

Core Requirements	30
Total Credits	30

Program Details

The Master of Science in Occupational Safety Management requires successful completion of a minimum of 30 credit hours. Students enrolled in the Worldwide Graduate Online program may complete the degree in six terms, or approximately two years, assuming full-time enrollment and continuous progress. Students pursuing this graduate degree must earn a minimum cumulative grade point average (CGPA) of 3.00 for all work completed at the University. The courses required to earn this degree are listed below.

Students should be aware that many courses have prerequisites and/or corequisites. Students are responsible for ensuring that all prerequisite and degree requirements are satisfied prior to enrollment in advanced coursework. The suggested plan of study is provided as a guide. A student's actual plan of study may vary based on term of admission, course availability, transfer credit, and other academic considerations. Students should consult with their academic advisor to develop an individualized plan of study.

Core Requirements

SFTY 530	Safety, Health and Environmental Legislation, Litigation and Compliance	3
SFTY 540	Disaster Preparedness and Emergency Response	3
SFTY 570	Fire Safety Management	3
SFTY 580	Environmental Protection for the Safety, Health and Environmental Manager	3
SFTY 590	Hazard Control Methods in Occupational Safety and Health	3
SFTY 600	Occupational Safety and Health Management	3
SFTY 611	Industrial Hygiene and Toxicology	3
SFTY 619	Human Factors and Ergonomics	3
RSCH 650	Research Methods and Analysis	3
SFTY 691	Capstone	3
Total Credits		30

Suggested Plans of Study

Two Year Plan

Requirements	Credits
SFTY 530 - Safety, Health and Environmental Legislation, Litigation and Compliance	3
Semester Hours	3

Requirements	Credits
SFTY 570 - Fire Safety Management	3
Semester Hours	3

Requirements	Credits
SFTY 540 - Disaster Preparedness and Emergency Response	3
Semester Hours	3

Requirements	Credits
SFTY 580 - Environmental Protection for the Safety, Health and Environmental Manager	3
Semester Hours	3

Requirements	Credits
SFTY 590 - Hazard Control Methods in Occupational Safety and Health or 600 - Occupational Safety and Health Management	3
Semester Hours	3

Total Credits

Total Hours for All Requirements: 15

Requirements	Credits
SFTY 600 - Occupational Safety and Health Management or 590 - Hazard Control Methods in Occupational Safety and Health	3
Semester Hours	3

Requirements	Credits
SFTY 611 - Industrial Hygiene and Toxicology	3
Semester Hours	3

Requirements	Credits
RSCH 650 - Research Methods and Analysis	3
Semester Hours	3

Requirements	Credits
SFTY 619 - Human Factors and Ergonomics	3
Semester Hours	3

Requirements	Credits
SFTY 691 - Capstone	3
Semester Hours	3

Total Credits

Total Hours for All Requirements: 15

One Year Plan

Requirements	Credits
SFTY 530 - Safety, Health and Environmental Legislation, Litigation and Compliance	3
SFTY 540 - Disaster Preparedness and Emergency Response	3
Semester Hours	6

Requirements	Credits
SFTY 570 - Fire Safety Management	3
SFTY 580 - Environmental Protection for the Safety, Health and Environmental Manager	3
Semester Hours	6

Requirements	Credits
SFTY 590 - Hazard Control Methods in Occupational Safety and Health	3
SFTY 600 - Occupational Safety and Health Management	3
Semester Hours	6

Requirements	Credits
SFTY 611 - Industrial Hygiene and Toxicology	3
SFTY 619 - Human Factors and Ergonomics	3
Semester Hours	6

Requirements	Credits
RSCH 650 - Research Methods and Analysis	3
SFTY 691 - Capstone	3
Semester Hours	6

Total Credits

Total Hours for All Requirements: 30

Estimated Cost of Attendance

Estimated Cost of Attendance: California Student Information (<https://catalog.erau.edu/student-life/student-affairs/california-student/>)