

MASTER OF SCIENCE IN ENVIRONMENTAL HEALTH, PLAN B, INDUSTRIAL HYGIENE SPECIALIZATION

Industrial Hygiene (IH) is the science and art devoted to the anticipation, recognition, evaluation, prevention, and control of workplace contaminants and stressors that may cause sickness, injury, impaired health, or impaired well-being among workers or citizens of the community.

Learn more about the Industrial Hygiene Specialization on the Department of Environmental and Radiological Health Sciences website. (<https://vetmedbiosci.colostate.edu/degree-programs/graduate/ms-environmental-health/industrial-hygiene/>)

[Students interested in graduate work should refer to the Graduate and Professional Bulletin.](#)

Learning Objectives

Upon successful completion, students will be able to:

1. Identify occupational and environmental agents, factors, and stressors generated by and/or associated with defined sources, unit operations, and or processes.
2. Describe qualitative and quantitative aspects of the generation of occupational and environmental agents, factors, and stressors.
3. Explain the physiological and/or toxicological interactions of physical, chemical, biological, and ergonomic agents, factors, and/or stressors with the human body.
4. Assess the qualitative and quantitative aspects of exposure assessment, dose-response, and risk characterization based on applicable pathways and modes of entry.
5. Calculate, interpret, and apply statistical and epidemiological data.
6. Recommend and evaluate engineering, administrative, and personal protective equipment controls and/or other interventions to reduce or eliminate hazards.
7. Demonstrate an understanding of applicable business and managerial practices.
8. Interpret and apply applicable occupational and environmental regulations.
9. Apply the fundamental aspects of safety and environmental health.

Requirements Effective Fall 2017

Code	Title	Credits
Core Courses		
ERHS 520	Environmental and Occupational Health Issues	3
ERHS 526	Industrial Hygiene	3
ERHS 527	Industrial Hygiene Laboratory	1
ERHS 528	Occupational Safety	3
ERHS 532	Epidemiologic Methods	3
ERHS 536	Advanced Occupational Health	3

ERHS 540	Principles of Ergonomics	3
ERHS 637	Environment, Safety, and Health Management	3
ERHS 679	Occ Env Health Interdisciplinary Symposium ¹	2
ERHS 695B	Independent Study: Occupational and Environmental Health ²	4
Out-of-Department Elective ³		2-4
Statistics (select at least 3 credits) ⁴		3
Elective Courses		6

Choose a minimum of 6 credits from the following in consultation with your advisor:

ERHS 502	Fundamentals of Toxicology
ERHS 503	Toxicology Principles
ERHS 504	Occupational and Environmental Toxicology
ERHS 530	Radiological Physics and Dosimetry I
ERHS 541	Ergonomics in Product and Process Design
ERHS 547	Equipment and Instrumentation
ERHS 549	Environmental Health Risk Assessment
ERHS 550	Principles of Radiation Biology
ERHS 636	Industrial Hygiene Control Methods
ERHS 656	Occupational Noise Control
ERHS 687	Internship ⁵
ERHS 693B	Research Seminar: Industrial Hygiene
ERHS 698	Research
ERHS 726	Aerosols and Environmental Health
PSY 692D	Seminar: Industrial/Organizational Psychology
PSY 792D	Advanced Seminar: Industrial/Organizational Psychology

RCR

Responsible Conduct Research Training is required of all master's students enrolled in the program 0

Program Total Credits: **39-41**

A minimum of 39 credits are required to complete this program.

¹ MAP ERC Trainees are required to take 4 credits.

² Students are required to take ERHS 695B for the professional paper requirement.

³ One additional course approved by student's committee.

⁴ Select three credits of statistics with approval of advisor and graduate committee.

⁵ Students who do not have at least one year of occupational and/or environment health professional experience must complete an internship consisting of at least 400 hours of work time. Internships must be approved by the student's advisor and graduate committee according to the program's Internship Handbook.

Requirements for All Graduate Degrees

For more information, please visit Requirements for All Graduate Degrees (<http://catalog.colostate.edu/general-catalog/graduate-bulletin/graduate-study/procedures-requirements-all-degrees/>) in the Graduate

and Professional Bulletin (<http://catalog.colostate.edu/general-catalog/graduate-bulletin/>).

Summary of Procedures for the Master's and Doctoral Degrees

NOTE: Each semester the Graduate School publishes a schedule of deadlines. Deadlines are available on the Graduate School website (<https://graduateschool.colostate.edu/deadline-dates/>). Students should consult this schedule whenever they approach important steps in their careers.

Forms (<https://graduateschool.colostate.edu/forms/>) are available online.

Step	Due Date
1. Application for admission (online)	Six months before first registration
2. Diagnostic examination when required	Before first registration
3. Appointment of advisor	Before first registration
4. Selection of graduate committee	Before the time of fourth regular semester registration
5. Filing of program of study (GS Form 6)	Before the time of fourth regular semester registration
6. Preliminary examination (Ph.D. and PD)	Two terms prior to final examination
7. Report of preliminary examination (GS Form 16) - (Ph.D. and PD)	Within two working days after results are known
8. Changes in committee (GS Form 9A)	When change is made
9. Application for Graduation (GS Form 25)	Refer to published deadlines from the Graduate School Website
9a. Reapplication for Graduation (online)	Failure to graduate requires Reapplication for Graduation (online) for the next time term for which you are applying
10. Submit thesis or dissertation to committee	At least two weeks prior to the examination or at the discretion of the graduate committee
11. Final examination	Refer to published deadlines from the Graduate School Website
12. Report of final examination (GS Form 24)	Within two working days after results are known; refer to published deadlines from the Graduate School website
13. Submit a signed Thesis/Dissertation Submission Form (GS Form 30) to the Graduate School and Submit the Survey of Earned Doctorates (Ph.D. only) prior to submitting the electronic thesis/dissertation	Refer to published deadlines from the Graduate School website.
14. Submit the thesis/dissertation electronically	Refer to published deadlines from the Graduate School website
15. Graduation	Ceremony information is available from the Graduate School website