

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.