An M.S. degree in occupational and environmental health (OEH) is offered with optional subprograms in agricultural safety and health and industrial hygiene.

**Learning Outcomes**

**Occupational and Environmental Health General Outcomes**

Students will be able to:

- describe major environmental hazards that adversely affect human health,
- demonstrate the use of regulatory guidelines that seek to control occupational health and injury issues,
- apply epidemiological principles used to assess associations between exposure to occupational health and injury hazards on health outcomes,
- use computer software and statistical methods to test a hypothesis, and
- use intervention and evaluation theory to prevent occupational health and injury hazards.

**M.S. in OEH Outcomes (Agricultural Safety and Health Subprogram)**

Students will be able to:

- describe the basic concepts of agricultural safety and health,
- summarize epidemiological principles that can be used to determine health outcomes associated with exposure to occupational hazards,
- explain appropriate research design and methodology related to the field of agricultural safety and health,
- communicate agricultural safety and health concepts both orally and in writing,
- interpret the significance of occupationally derived data relative to an exposure or health outcome,
- analyze agricultural safety and health intervention programs, and
- design and implement a research project relative to peer-reviewed literature in agricultural safety and health.

**M.S. in OEH Outcomes (Industrial Hygiene Subprogram)**

- anticipate and recognize occupational and environmental hazards (i.e., physical, chemical, and biological agents, factors, and stressors) generated by or associated with defined sources, unit operations, and/or processes;
- describe qualitative and quantitative aspects of generation of hazards;
- apply scientific principles, instrumentation, and methods to adequately assess exposures to hazards;
- organize and interpret exposure data using qualitative and quantitative methods in the context of physiological, epidemiological, and toxicological knowledge of the response of the human body to hazards;
- recommend and evaluate controls to reduce or eliminate hazards with regard to traditional hierarchy considerations;
- understand applicable business, managerial, and leadership practices with emphasis on program and project management;
- communicate effectively and appropriately to advocate for continuous improvement in worker health and safety to pertinent audiences, including workforce, management, the public, and professional peers;
- interpret and apply applicable and emerging regulations, consensus standards, and best practices affecting occupational and environmental health;
- demonstrate an understanding of the professional code of ethics; and
- understand the value of and path to attain professional certification in industrial hygiene and allied fields.