Program Educational Objectives

Within a few years after graduation, graduates working as Occupational Safety professionals will demonstrate abilities to:

1. Apply knowledge and principles of mathematics, science, technology in the anticipation, recognition, and evaluation of conditions and practices in the work environment, and for the development of hazard prevention and control strategies.
2. Employ knowledge and principles of management, business, and behavioral sciences in the selection, implementation and administration of programs and procedures for hazard prevention and control.
3. Identify and apply relevant safety and health standards, laws, regulations, and best industry practices to occupational safety functions in the local, national or global context, as applicable.
4. Effectively communicate with diverse stakeholders, including management, workers, consumers, neighbors, and the public, to support occupational safety and health initiatives.
5. Continue their professional growth and the integration of new knowledge into their profession, and demonstrate ethical, societal, and professional responsibility.

Student Outcomes

General outcomes

Students graduating from the BS, Occupational Safety program will be able to:

A. apply knowledge of mathematics, science, and applied sciences
B. design and conduct experiments, an ability to analyze and interpret data
C. formulate or design a system, process, or program to meet desired needs
D. function on multidisciplinary teams
E. identify and solve applied science problems in OS
F. demonstrate an understanding of professional and ethical responsibility
G. communicate effectively
H. (have the broad education necessary to) understand the impact of solutions in a global and societal context

I. show a recognition of the need for and an ability to engage in life-long learning

J. demonstrate a knowledge of contemporary issues in OS

K. show an ability to use the techniques, skills, and modern scientific and technical tools necessary for professional practice.

Specific outcomes

Students graduating from the BS, Occupational Safety program will be able to:

1. anticipate, recognize, evaluate, and develop control strategies for hazardous conditions and work practices;

2. demonstrate the application of business and risk management concepts;

3. demonstrate an understanding of the fundamental aspects of safety,

4. demonstrate an understanding of the fundamental aspects of industrial hygiene,

5. demonstrate an understanding of the fundamental aspects of environmental science,

6. demonstrate an understanding of the fundamental aspects of fire science,

7. demonstrate an understanding of the fundamental aspects of hazardous materials,

8. demonstrate an understanding of the fundamental aspects of emergency management,

9. demonstrate an understanding of the fundamental aspects of ergonomics;

10. design and evaluate safety, health, and/or environmental programs;

11. apply adult learning theory to safety training methodology;

12. identify and apply applicable standards, regulations, and codes;

13. conduct accident investigations and analyses;

14. apply principles of safety and health in a non-academic setting through an intern, cooperative, or supervised.