

ABET Program Educational Objectives and Student Outcomes

Program Educational Objectives

Program educational objectives (PEO's) describe career and professional accomplishments within three to five years following graduation.

These PEO's were developed by the MSOH-IH faculty and reviewed by members of the MSOH-IH Industrial Advisory Committee (IAC), which meets twice per year. It should be noted that a strong attempt was made to align these program educational objectives with the RMCOEH Center Goals. The RMCOEH Center Goals were established and periodically reviewed by the RMCOEH Advisory Board, which also meets twice per year

Program Goal 1: Post-graduates from our quality MSOH-IH program should (be):

Objective 1a: Active both nationally and locally with AIHA and engaged with other germane professional organizations

Objective 1b: Leaders that increase diversity in recruiting, including women and minorities, into the profession

Objective 1c: Academically and professionally qualified to take the ABIH Board Examination and obtain the CIH certification

Program Goal 2: Post-graduates should be well versed in the research-to-practice process

Objective 2a: Develop and implement multidisciplinary research-to-practice efforts with others in their organization and with ancillary entities

Objective 2b: Continue to take high quality and timely continuing education (CE) courses in industrial hygiene

Program Goal 3: Post-graduates should pursue superior continuing education, service activities, and outreach

Objective 3a: Use electronic resources effectively and efficiently

Objective 3b: Continue to take high quality and timely continuing education (CE) courses in industrial hygiene

Objective 3c: Develop outreach partnerships with regional universities; local, state, tribal and federal governmental agencies; and private organizations, which includes acting as mentors for summer practicums for current IH students

Program Goal 4: Post-graduates should accomplish strong interdisciplinary collaborations

Objective 4a: Expand relationships with other professionals in the field of environmental health and safety as well as other STEM (i.e., science, technology, engineering, and mathematics) fields

Student Outcomes

Student Outcomes for the MSOH-IH Program are those skills and knowledge graduates should have on the day of graduation.

General Program Outcomes (Relative to ANSAC-ABET Criteria)

- (a) An ability to apply knowledge of mathematics, science, and applied sciences
- (b) An ability to design and conduct experiments, as well as to analyze and interpret data
- (c) An ability to formulate or design a system, process, or program to meet desired needs
- (d) An ability to function on multidisciplinary teams
- (e) An ability to identify and solve applied science problems
- (f) An understanding of professional and ethical responsibility
- (g) An ability to communicate effectively
- (h) The broad education necessary to understand the impact of solutions in a global and societal context
- (i) A recognition of the need for and an ability to engage in life-long learning
- (j) A knowledge of contemporary issues
- (k) An ability to use the techniques, skills, and modern scientific and technical

MSOH-IH Program Outcomes (Relative to ANSAC-ABET Program-Specific Criteria)

- (a) Identify agents, factors, and stressors generated by and/or associated with defined sources, unit operations, and/or processes
- (b) Describe qualitative and quantitative aspects of generation of agents, factors, and stressors
- (c) Understand physiological and/or toxicological interactions of physical, chemical, biological, and ergonomic agents, factors, and/or stressors with the human body
- (d) Assess qualitative and quantitative aspects of exposure assessment, dose-response, and risk characterization based on applicable pathways and modes of entry
- (e) Calculate, interpret, and apply statistical and epidemiological data
- (f) Recommend and evaluate engineering, administrative, and personal protective equipment controls and/or other interventions to reduce or eliminate hazards
- (g) Demonstrate an understanding of applicable business and managerial practices
- (h) Interpret and apply applicable occupational and environmental regulations
- (i) Understand fundamental aspects of safety and environmental health
- (j) Attain recognized professional certification