



ENVIRONMENTAL HEALTH: INDUSTRIAL HYGIENE PhD

The Industrial Hygiene program focuses on the health and safety of people at work, the community at large, and the environment. Specific concerns are with the recognition, evaluation and control of potential workplace hazards, including chemical, physical, and biological agents. Students must complete a minimum of 48 credits. To complete program requirements, students will choose electives, in consultation with their academic advisor, which may include credits towards a minor.

CORE REQUIREMENTS

3 CREDITS

PubH 6250* Foundations of Public Health (2 cr)

PubH 6742 Ethics in Public Health: Research & Policy (1 cr)

**Required for students who do not have an MPH, a bachelor's degree in Public Health or a Minor in Public Health.*

THESIS CREDITS

24 CREDITS

PubH 8888 Thesis Credits (24 cr)

INDUSTRIAL HYGIENE REQUIREMENTS

23 CREDITS

These courses are only required for students who do not have a master's degree from an ABET-accredited industrial hygiene program. Individual courses may be omitted in consultation with the advisor if comparable graduate level coursework can be demonstrated.

PubH 6130 Occupational Medicine: Principles and Practice (2 cr)

PubH 6150 Interdisciplinary Evaluation of Occupational Health & Safety Field Problems (3 cr)

PubH 6159 Principles of Toxicology I (2 cr)

PubH 6170 Introduction to Occupational Health & Safety (3 cr)

PubH 6172 Industrial Hygiene Applications (2 cr)

PubH 6173 Exposure to Physical Agents (2 cr)

PubH 6174 Control of Workplace Exposure (3 cr)

PubH 6175 Environmental Measurements Laboratory (2 cr)

PubH 6192 Measurement & Properties of Air Contaminants (2 cr)

PubH 6193 Advanced Topics in Human Exposure Science (2 cr)

ELECTIVES

Electives are determined in consultation with the advisor and committee, and may include the following:

PubH 6141 GIS and Spatial Analysis for Public Health (3 cr)

PubH 6161 Regulatory Toxicology (2 cr)

PubH 6162 Biomarkers (2 cr)

PubH 6177 Nanotechnology Health & Safety (3 cr)

PubH 6450 Biostatistics I (4 cr)

PubH 6451 Biostatistics II (4 cr)

PubH 7430 Statistical Methods for Correlated Data (3 cr)

PubH 7440 Introduction to Bayesian Data Analysis (3 cr)

PubH 8120 Occupational Health & Safety Research Seminar (1 cr)

ME 5113 Aerosol/Particle Engineering (4 cr)

PROGRAM COORDINATOR

Ned McCully
Email: nmccully@umn.edu

DIRECTOR OF GRADUATE STUDIES

Peter Raynor, PhD
Email: praynor@umn.edu
Phone: 612-625-7135
Web: sph.umn.edu

