

INDUSTRIAL HYGIENE, MSPH

Vision Statement: To improve worker and community health by developing the most competent industrial hygienists in the world.

Millions of workers across the globe make our modern lifestyle a reality. Industrial hygiene (IH) is the critical profession that protects the health and wellbeing of these workers and their communities. The Tulane MSPH-IH program prepares students to take on challenging professional careers in exposure science and worker protection in occupational and community settings. Our program is ABET accredited, which allows our graduates to take the Certified Industrial Hygienist (CIH) exam with one less year of professional work experience. Graduates of our program receive the designation of Graduate Safety Professionals (GSP). The program is also a recipient of a National Institute of Occupational Safety and Health (NIOSH) training grant to support students financially. Finally, our extensive alumni network and expert faculty make our program one of the premier graduate industrial hygiene programs nationally and globally.

Our graduate certificate program is designed to prepare CIH candidates for the exam, by providing the 15 industrial hygiene-specific credits required to apply, and by equipping students with knowledge and skills important for the comprehensive practice of industrial hygiene.

Accreditation

The Industrial Health program is accredited through the **Applied Science Accreditation Commission of ABET**, an accrediting agency for programs in applied science, computing, engineering, and engineering technology. Tulane's Industrial Hygiene program has been ABET -accredited since 1996.

Student Enrollment and Graduation Statistics

Academic Year	New Student Enrolled	Total Students Enrolled	Total Students Graduated
2017-18	7	15	6
2018-19	4	13	5
2019-20	5	13	7
2020-21	6	12	4
2021-22	18	23	2
2022-2023	16	29	1
2023-24	9	30	4(anticipated)

Graduates of the MSPH in Industrial Hygiene receive one year of credit towards the experience requirement to sit for the exam to become a board-certified industrial hygienist (CIH, American Board of Industrial Hygiene).

NIOSH Training and Education Grant

The Tulane MSPH program in Industrial Hygiene is supported by a Training and Education grant awarded by the National Institute for Occupational Safety and Health (NIOSH). Students in the MSPH-IH program are eligible to apply for a NIOSH traineeship which may provide partial tuition support and stipend. For further details on the NIOSH training program, contact Program Director Dr. Mark Wilson.

Program Competencies

At the completion of the MSPH degree, the student will be able to:

- · Anticipate and identify hazards in the workplace using basic and applied scientific and engineering principles.
- Quantify and evaluate the hazard or risks of occupational health stressors utilizing the methods and techniques of analytical chemistry, other measurement sciences, and statistics.
- · Analyze and interpret toxicology and epidemiology data and information on occupational health hazards.
- · Design and evaluate engineering and administrative controls for workplace hazards, with emphasis on general and local exhaust ventilation.
- · Select and specify appropriate types of personal protective equipment for control of occupational exposures.
- Demonstrate knowledge of the development, management, and evaluation of industrial hygiene programs.
- · Communicate verbally and in writing, the nature, risks, and remediation of workplace and environmental hazards.
- · Interpret and apply environmental and occupational safety and health regulations and standards.



Requirements

Course ID	Title	Credits
SPHL 6020	Foundations in Public Health	3
SPHL 6050	Biostatistics for Public Health	3
SPHL 6060	Epidemiology for Public Health	3
SPHL 6070	Health Systems Policy and Management	3
SPHL 6080	Design Strategies in Public Health Programs	3
Program Course Requirements (31 credits)		
ENHS 6030	Survey of Environmental Health	3
ENHS 6300	Radiological Health	3
ENHS 6540	Principles of Occupational Health	3
ENHS 6600	Principles of Toxicology	3
ENHS 6620	Physical Agents & Ergonomic Hazards in the Workplace	3
ENHS 6700	Principles of Safety	3
ENHS 6720	Principles of Industrial Hygiene	3
ENHS 7110	Industrial Ventilation & Chemical Hazard Control	3
ENHS 7310	Occupational Laws and Compliance	2
ENHS 7500	Air Sampling & Analysis	3
ENHS 7620	Health Risk Assessment	3
SPHL 9980	Applied Practice Experience	0
SPHL 7950	Integrative Learning Experience	0
Total Credit Hours		47

The MSPH in Industrial Hygiene requires 47 credits. In addition, students must also pass the industrial hygiene comprehensive examination or obtain certification from the American Board of Industrial Hygiene (CIH).

Model Schedule

Year 1, Fall Semester SPHL 6020 Foundations in Public Health 3 SPHL 6050 Biostatistics for Public Health 3 ENHS 6600 Principles of Toxicology 3 ENHS 6720 Principles of Industrial Hygiene 3 SPHL 6060 Epidemiology for Public Health 3 ENHS 6030 Survey of Environmental Health 3 ENHS 6620 Physical Agents & Ergonomic Hazards in the Workplace 3 ENHS 7500 Air Sampling & Analysis 3 Year 1, Summer Semester S ENHS 6700 Principles of Safety 3 ENHS 7310 Occupational Laws and Compliance 2 SPHL 9980 Applied Practice Experience 0 Year 2, Fall Semester 2 SPHL 6070 Health Systems Policy and Management 3 SPHL 6080 Design Strategies in Public Health Programs 3 ENHS 6540 Principles of Occupational Health 3 ENHS 6540 Principles of Occupational Health 3 ENHS 7110 Industrial Ventilation & Chemical Hazard Control <	Course ID	Title	Credits
SPHL 6050 Biostatistics for Public Health 3 ENHS 6600 Principles of Toxicology 3 ENHS 6720 Principles of Industrial Hygiene 3 Year 1, Spring Semester SPHL 6060 Epidemiology for Public Health 3 ENHS 6030 Survey of Environmental Health 3 ENHS 6620 Physical Agents & Ergonomic Hazards in the Workplace 3 ENHS 7500 Air Sampling & Analysis 3 Year 1, Summer Semester ENHS 6700 Principles of Safety 3 ENHS 7310 Occupational Laws and Compliance 2 SPHL 9980 Applied Practice Experience 0 Year 2, Fall Semester SPHL 6070 Health Systems Policy and Management 3 SPHL 6080 Design Strategies in Public Health Programs 3 ENHS 6540 Principles of Occupational Health 3 ENHS 7110 Industrial Ventilation & Chemical Hazard Control 3 Year 2, Spring Semester ENHS 6300 Radiological Health 3	Year 1, Fall Semester		
ENHS 6600 Principles of Toxicology 3 ENHS 6720 Principles of Industrial Hygiene 3 Year 1, Spring Semester Principles of Industrial Hygiene 3 SPHL 6060 Epidemiology for Public Health 3 ENHS 6030 Survey of Environmental Health 3 ENHS 6620 Physical Agents & Ergonomic Hazards in the Workplace 3 ENHS 7500 Air Sampling & Analysis 3 Year 1, Summer Semester 5 ENHS 6700 Principles of Safety 3 ENHS 7310 Occupational Laws and Compliance 2 SPHL 9980 Applied Practice Experience 0 Year 2, Fall Semester 5 SPHL 6070 Health Systems Policy and Management 3 SPHL 6080 Design Strategies in Public Health Programs 3 ENHS 6540 Principles of Occupational Health 3 ENHS 7110 Industrial Ventilation & Chemical Hazard Control 3 Year 2, Spring Semester ENHS 6300 Radiological Health	SPHL 6020	Foundations in Public Health	3
ENHS 6720 Principles of Industrial Hygiene 3 Year 1, Spring Semester Phus 6060 Epidemiology for Public Health 3 ENHS 6030 Survey of Environmental Health 3 ENHS 6620 Physical Agents & Ergonomic Hazards in the Workplace 3 ENHS 7500 Air Sampling & Analysis 3 Year 1, Summer Semester ENHS 6700 Principles of Safety 3 ENHS 7310 Occupational Laws and Compliance 2 SPHL 9980 Applied Practice Experience 0 Year 2, Fall Semester SPHL 6070 Health Systems Policy and Management 3 SPHL 6080 Design Strategies in Public Health Programs 3 ENHS 6540 Principles of Occupational Health 3 ENHS 7110 Industrial Ventilation & Chemical Hazard Control 3 Year 2, Spring Semester ENHS 6300 Radiological Health 3	SPHL 6050	Biostatistics for Public Health	3
Year 1, Spring SemesterSPHL 6060Epidemiology for Public Health3ENHS 6030Survey of Environmental Health3ENHS 6620Physical Agents & Ergonomic Hazards in the Workplace3ENHS 7500Air Sampling & Analysis3Year 1, Summer SemesterSHAS 6700Principles of Safety3ENHS 6700Principles of Safety3ENHS 7310Occupational Laws and Compliance2SPHL 9980Applied Practice Experience0Year 2, Fall SemesterYear 2, Fall SemesterSPHL 6070Health Systems Policy and Management3SPHL 6080Design Strategies in Public Health Programs3ENHS 6540Principles of Occupational Health3ENHS 7110Industrial Ventilation & Chemical Hazard Control3Year 2, Spring SemesterENHS 6300Radiological Health3	ENHS 6600	Principles of Toxicology	3
SPHL 6060 Epidemiology for Public Health 3 ENHS 6030 Survey of Environmental Health 3 ENHS 6620 Physical Agents & Ergonomic Hazards in the Workplace 3 ENHS 7500 Air Sampling & Analysis 3 Year 1, Summer Semester 8 ENHS 6700 Principles of Safety 3 ENHS 7310 Occupational Laws and Compliance 2 SPHL 9980 Applied Practice Experience 0 Year 2, Fall Semester SPHL 6070 Health Systems Policy and Management 3 SPHL 6080 Design Strategies in Public Health Programs 3 ENHS 6540 Principles of Occupational Health 3 ENHS 7110 Industrial Ventilation & Chemical Hazard Control 3 Year 2, Spring Semester ENHS 6300 Radiological Health 3	ENHS 6720	Principles of Industrial Hygiene	3
ENHS 6030 Survey of Environmental Health ENHS 6620 Physical Agents & Ergonomic Hazards in the Workplace 3 ENHS 7500 Air Sampling & Analysis 3 Year 1, Summer Semester ENHS 6700 Principles of Safety 3 ENHS 7310 Occupational Laws and Compliance 2 SPHL 9980 Applied Practice Experience 0 Year 2, Fall Semester SPHL 6070 Health Systems Policy and Management 3 SPHL 6080 Design Strategies in Public Health Programs 3 ENHS 6540 Principles of Occupational Health 1 ENHS 7110 Industrial Ventilation & Chemical Hazard Control 3 Year 2, Spring Semester ENHS 6300 Radiological Health 3 Radiological Health 4 Radiologi	Year 1, Spring Semester		
ENHS 6620 Physical Agents & Ergonomic Hazards in the Workplace 3 ENHS 7500 Air Sampling & Analysis 3 Year 1, Summer Semester ENHS 6700 Principles of Safety 3 ENHS 7310 Occupational Laws and Compliance 2 SPHL 9980 Applied Practice Experience 0 Year 2, Fall Semester SPHL 6070 Health Systems Policy and Management 3 SPHL 6080 Design Strategies in Public Health Programs 3 ENHS 6540 Principles of Occupational Health Programs 3 ENHS 7110 Industrial Ventilation & Chemical Hazard Control 3 Year 2, Spring Semester ENHS 6300 Radiological Health 3	SPHL 6060	Epidemiology for Public Health	3
ENHS 7500 Air Sampling & Analysis Year 1, Summer Semester ENHS 6700 Principles of Safety SPHL 97310 Occupational Laws and Compliance SPHL 9980 Applied Practice Experience Year 2, Fall Semester SPHL 6070 Health Systems Policy and Management SPHL 6080 Design Strategies in Public Health Programs SPHL 6080 Principles of Occupational Health SPHS 6540 Principles of Occupational Health Industrial Ventilation & Chemical Hazard Control Year 2, Spring Semester ENHS 6300 Radiological Health 3 Radiological Health	ENHS 6030	Survey of Environmental Health	3
Year 1, Summer Semester ENHS 6700 Principles of Safety 3 ENHS 7310 Occupational Laws and Compliance 2 SPHL 9980 Applied Practice Experience 0 Year 2, Fall Semester SPHL 6070 Health Systems Policy and Management 3 SPHL 6080 Design Strategies in Public Health Programs 3 ENHS 6540 Principles of Occupational Health 3 ENHS 7110 Industrial Ventilation & Chemical Hazard Control 3 Year 2, Spring Semester ENHS 6300 Radiological Health 3	ENHS 6620	Physical Agents & Ergonomic Hazards in the Workplace	3
ENHS 6700 Principles of Safety 3 ENHS 7310 Occupational Laws and Compliance 2 SPHL 9980 Applied Practice Experience 0 Year 2, Fall Semester SPHL 6070 Health Systems Policy and Management 3 SPHL 6080 Design Strategies in Public Health Programs 3 ENHS 6540 Principles of Occupational Health 3 ENHS 7110 Industrial Ventilation & Chemical Hazard Control 3 Year 2, Spring Semester ENHS 6300 Radiological Health 3	ENHS 7500	Air Sampling & Analysis	3
ENHS 7310 Occupational Laws and Compliance 2 SPHL 9980 Applied Practice Experience 0 Year 2, Fall Semester SPHL 6070 Health Systems Policy and Management 3 SPHL 6080 Design Strategies in Public Health Programs 3 ENHS 6540 Principles of Occupational Health 3 ENHS 7110 Industrial Ventilation & Chemical Hazard Control 3 Year 2, Spring Semester ENHS 6300 Radiological Health 3	Year 1, Summer Semester		
SPHL 9980 Applied Practice Experience 0 Year 2, Fall Semester SPHL 6070 Health Systems Policy and Management 3 SPHL 6080 Design Strategies in Public Health Programs 3 ENHS 6540 Principles of Occupational Health 8 ENHS 7110 Industrial Ventilation & Chemical Hazard Control 3 Year 2, Spring Semester ENHS 6300 Radiological Health 3	ENHS 6700	Principles of Safety	3
Year 2, Fall Semester SPHL 6070 Health Systems Policy and Management 3 SPHL 6080 Design Strategies in Public Health Programs 3 ENHS 6540 Principles of Occupational Health 8 ENHS 7110 Industrial Ventilation & Chemical Hazard Control 3 Year 2, Spring Semester ENHS 6300 Radiological Health 3	ENHS 7310	Occupational Laws and Compliance	2
SPHL 6070 Health Systems Policy and Management 3 SPHL 6080 Design Strategies in Public Health Programs 3 ENHS 6540 Principles of Occupational Health 3 ENHS 7110 Industrial Ventilation & Chemical Hazard Control 3 Year 2, Spring Semester ENHS 6300 Radiological Health 3	SPHL 9980	Applied Practice Experience	0
SPHL 6080 Design Strategies in Public Health Programs 3 ENHS 6540 Principles of Occupational Health 3 ENHS 7110 Industrial Ventilation & Chemical Hazard Control 3 Year 2, Spring Semester ENHS 6300 Radiological Health 3	Year 2, Fall Semester		
ENHS 6540 Principles of Occupational Health 3 ENHS 7110 Industrial Ventilation & Chemical Hazard Control 3 Year 2, Spring Semester ENHS 6300 Radiological Health 3	SPHL 6070	Health Systems Policy and Management	3
ENHS 7110 Industrial Ventilation & Chemical Hazard Control 3 Year 2, Spring Semester ENHS 6300 Radiological Health 3	SPHL 6080	Design Strategies in Public Health Programs	3
Year 2, Spring Semester ENHS 6300 Radiological Health 3	ENHS 6540	Principles of Occupational Health	3
ENHS 6300 Radiological Health 3	ENHS 7110	Industrial Ventilation & Chemical Hazard Control	3
·	Year 2, Spring Semester		
ENHS 7620 Health Risk Assessment 3	ENHS 6300	Radiological Health	3
	ENHS 7620	Health Risk Assessment	3



SPHL 7950 Integrative Learning Experience

0

Total Credit Hours 47

Industrial hygiene comprehensive examination

Semester subtotal: 6

Total degree credits: 47