

ENVIRONMENTAL HEALTH SCIENCE (MS)

Department Website (<https://med.nyu.edu/departments-institutes/medicine/divisions/environmental-medicine/education/ms-environmental-health-sciences/>)

NYSED: 08043 **HEGIS:** 1299.00 **CIP:** 51.2202

Program Description

The Master of Science degree program in Environmental Health Science is a specialized course of study providing students with the opportunity to develop applicable skills and expertise in selected subject areas. The program is designed for individuals needing graduate training for employment in jobs involving toxicology, pharmaceutical research, worker health and safety, health hazard communication, health risk assessment, and environmental analysis of pollutants and toxicants, including related areas of administration and technical sales. Potential employers include academia, industry, consulting firms, trade associations, and local, state, and federal governmental agencies. The Master of Science program can also serve as a stepping stone to the PhD program in Environmental Health Sciences.

Tracks

The program offers two specialized tracks:

Environmental Toxicology

The environmental toxicology track provides a broad cross-sectional education on the toxicology of environmental exposures at all levels, from molecular/cell studies to experimental models and human population studies, including community based research.

Occupational-Environmental Hygiene

The occupational-environmental hygiene track specifically focuses on the recognition, evaluation, and control of chemical and physical agents in occupational settings.

Admissions

All applicants to the Graduate School of Arts and Science (GSAS) are required to submit the general application requirements (<https://gsas.nyu.edu/nyu-as/gsas/admissions/arc.html>), which include:

- Academic Transcripts (<https://gsas.nyu.edu/nyu-as/gsas/admissions/arc/academic-transcripts.html>)
- Test Scores (<https://gsas.nyu.edu/nyu-as/gsas/admissions/arc/test-scores.html>) (if required)
- Applicant Statements (<https://gsas.nyu.edu/nyu-as/gsas/admissions/arc/statements.html>)
- Résumé or Curriculum Vitae
- Letters of Recommendation (<https://gsas.nyu.edu/nyu-as/gsas/admissions/arc/letters-of-recommendation.html>), and
- A non-refundable application fee (<https://gsas.nyu.edu/admissions/arc.html#fee>).

See Environmental Health Sciences (<https://gsas.nyu.edu/admissions/arc/programs/environmental-health-sciences.html>) for admission requirements and instructions specific to this program.

Program Requirements

The program requires the completion of 36 credits, and a Master's Thesis. The program in environmental health sciences offers two specialized tracks: environmental toxicology and occupational-environmental hygiene. See recommended courses for each track below.

Course	Title	Credits
Major Requirements		
Environmental Health Sciences Electives (chosen in close consultation with an academic adviser)		36
Total Credits		36

Tracks

Environmental Toxicology

Course	Title	Credits
Recommended Courses		
EHSC-GA 1004	Environmental Health	4
EHSC-GA 2025	Communication skills for Biomedical Students	2
EHSC-GA 2303	Intro to Biostatistics	4
EHSC-GA 2310	Principles of Toxicology	4
EHSC-GA 2311	Organ System Toxicology	4

Occupational-Environmental Hygiene

Course	Title	Credits
Recommended Courses		
EHSC-GA 1004	Environmental Health	4
EHSC-GA 2303	Intro to Biostatistics	4
EHSC-GA 2310	Principles of Toxicology	4
EHSC-GA 2035	Principles of Environmental Measurements	4
EHSC-GA 2037	Environmental Measurements Laboratory I	4
EHSC-GA 2039	Introduction to Epidemiology	4

Additional Program Requirements

Master's Thesis

Students must complete and submit a research-based master's thesis project performed under the guidance of a faculty member.

Courses at Other NYU Schools

Students may take relevant courses in other schools within the University, for example, in environmental management and planning, environmental law, risk assessment, and environmental impact assessment. The program of study may be full time or part time. Master of Science students are required to attend departmental seminars and journal clubs. Laboratory placements for study pursuing research-based thesis projects may be arranged in consultation with the student's academic adviser. Most courses are offered at the Washington Square campus.

Sample Plan of Study

Course	Title	Credits
1st Semester/Term		
Elective		4
Elective		4
Elective		4
Credits		12

2nd Semester/Term	
Elective	4
Elective	4
Credits	8
3rd Semester/Term	
Elective	4
Elective	4
Credits	8
4th Semester/Term	
Elective	4
Elective	4
Credits	8
Total Credits	36

Learning Outcomes

Upon successful completion of the program, graduates will:

1. Have an introduction to underlying theories, concepts, critical issues, historical information and gaps of knowledge in the field of environmental health science to begin to understand exposure science as it relates to human health, disease, and disease treatment or prevention.
2. Learn about scientific methods of inquiry, including proper hypothesis development; as well as familiarity with and/or basic use of technologies and investigative tools relevant to the specific line of investigation being undertaken in the field of environmental health sciences.
3. Understand and implement appropriate methods of data analysis and statistical testing applicable to the MS thesis research being undertaken.
4. Develop skills for oral and written scientific communication in the field of environmental health science, learn how to produce written scientific reports that are of sufficient quality for publication in the journals available in the field, as well as the ability to deliver high quality oral and poster presentations at scientific conferences. Understand how scientific findings get translated to governmental regulatory agencies and the public.
5. Develop an understanding of post MS degree career options in the field of environmental health sciences, building knowledge and experience in scientific peer-review, grantsmanship, teaching, mentoring and career development, whether in the next stages of academia, or in industry or government sectors.

Policies

NYU Policies

University-wide policies can be found on the New York University Policy pages (<https://bulletins.nyu.edu/nyu/policies/>).

Graduate School of Arts and Science Policies

Academic Policies for the Graduate School of Arts and Science can be found on the Academic Policies page (<https://bulletins.nyu.edu/graduate/arts-science/academic-policies/>).