ENVIRONMENTAL ENGINEERING, PHD

Environmental Engineering, PhD

A PhD student in the Department of Environmental Health and Engineering will conduct research aimed at addressing an environmental problem in their subfield of interest, whether that be water issues, environmental pollution, climate change, or energy systems, or waste treatment and reuse.

The goals for students in our Ph.D. program are:

- develop reasoning skills that can be applied to new and unanticipated environmental issues;
- learn how to independently pose scientific questions and answer them in a systematic manner;
- acquire depth of understanding and technical knowledge in a particular study area, on par with other scientists and engineers worldwide; and
- make a significant contribution to scientific understanding in their area of study.

Students from the PhD program have gone on to pursue successful careers in academia, local, state, and federal government, environmental consulting, and many other fields.

Doctoral students should complete their formal coursework in their first two years of the program. The coursework should cover both the student's principal research area and include courses providing breadth across the discipline.

Program Requirements

Research areas in Environmental Health and Engineering are diverse and we believe all EHE students will gain from participating in courses that provide knowledge across disciplinary boundaries before pursuing their unique curriculum.

All EHE doctoral students are required to register for the following department seminars, doctoral research courses, and ethics courses. Additional guidance for PhD students is listed in the EHE Graduate Student Handbook (https://publichealth.jhu.edu/departments/environmental-health-and-engineering/programs/graduate-programs/graduate-student-resources/).

Code	Title	Credits
EN.570.841	Wolman Seminar- Graduates (every semester)	1
PH.180.860	EHE Student Seminar & Grand Rounds (once per year in Years 2-4)	1
EN.570.801	Doctoral Research (every semester)	3 - 20
EN.500.603	Graduate Academic Ethics (first semester of enrollment)	0
AS.360.625	Responsible Conduct of Research (first semester of enrollment)	0.5
PH.180.610	Applied Environmental Health Practice	4
EN.570.616	Data Analytics in Environmental Health and Engineering	3
Three additional science or engineering courses, chosen in consultation with one's PhD advisor.		

Doctoral students appointed in WSE will need to complete the following requirements:

EHE Safety Seminars
Attendance is required at all of the scheduled meetings if any lab or field work is planned. This safety training is required each Fall semester for all students participating in lab-based research or field-based research. If there is a conflict with another class, students should ask the instructor to be excused from the other class. Watch for emails announcing the dates of the safety seminars.

Responsible Conduct of Research (RCR)
All WSE graduate students who conduct research must take the Responsible Conduct of Research training. It is expected that this training is conducted prior to participating in any research, preferably in the first semester of coursework. Students will not be able to graduate until this requirement is satisfied. PhD students must take the in-person version of this course, AS.360.625 Responsible Conduct of Research.

Academic Ethics Course
PhD students must take EN.500.603 Graduate Academic Ethics. This WSE requirement is a 20-minute online tutorial to help educate all new graduate students about their academic and ethical responsibilities— all new students are required to complete this and receive a passing grade (100% on the quiz). Students must successfully complete the online tutorial and quiz within the first eight weeks of their first semester in the graduate program. Students are automatically enrolled in the course. Students will not be able to graduate until this requirement is satisfied.