

Ph.D. level core course in Environmental Engineering

Ph.D. Program

Ph.D. students must complete a total of 63 credit hours including: 24 to 36 hours of classroom graduate-level courses, 6 cr hours of graduate seminar (EVEN 6102), and 21 to 33 hours of research (EVEN 6306).

Students should successfully complete the Ph.D. Qualifying Exam.

Students should successfully defend dissertation proposal and final dissertation.

The required core courses for Ph.D. program in Environmental Engineering will consist of the following courses:

1. EVEN 6354 - Environmental Regulations and Policy (3 cr)
2. EVEN 6319 - Chemical Principles for Environmental Engineering Design (3 cr)
3. EVEN 6102 – Environmental Engineering Graduate Seminar (1 cr) (6 times)
4. Choose at least two courses from the following:
 - EVEN 6308 - Fundamentals of Solid and Hazardous Waste Engineering (3 cr)
 - EVEN 6309 - Fundamentals of Air Quality and Pollution Control (3 cr)
 - EVEN 6316 - Fundamentals of Environmental Biotechnology (3 cr)
 - EVEN 6325 - Physical-Chemical Water Treatment Processes (3 cr)
5. Choose at least one environmental modeling or data course from the following:
 - EVEN 6318 - Environmental Systems Modeling (or other EVEN modeling course) (3 cr)
 - EVEN 6332 – Environmental Data Analysis (3 cr)

Other graduate-level elective courses available in the program are as follows:

EVEN 6304* - Environmental Engineering Internship (1-3 cr, variable)

EVEN 6311 - Air Quality Modeling (3 cr)

EVEN 6312 - Surface Water Quality Modeling (3 cr)

EVEN 6313 – Groundwater Contaminant Transport Modeling (3 cr)

EVEN 6329 - Environmental Monitoring and Measurements (3 cr)

EVEN 6340 - Decision Sciences for Environmental Systems (3 cr)

EVEN 6341 - Environmental Informatics (3 cr)

EVEN 6342 - Engineering Optimization for Environmental Systems (3 cr)

EVEN 6356 - Special Topics in Environmental Engineering (3 cr)

*PhD students receiving funding from any active research grant or project can take internship/Co-Op using EVEN 6304 only once during their study after nine semesters enrolled in the program with the approval of their research advisor and the Department Chair.

Students can take up to two courses (6 cr hours) outside the department by consulting with your research/academic advisor. One additional course may be taken outside the department (3 cr) with approval of the departmental graduate committee.

From spring 2023 semester onwards (and thereafter), the Ph.D. Qualifying Exam will be taken on four Ph.D. core courses as per the criteria mentioned above in items # 2, # 4 and # 5, which will be selected by consulting with your research/academic advisor and the Ph.D. Program Coordinator.

[Click here to see the degree requirements](#)