## M.S. level core course in Environmental Engineering

## MS Program

**Thesis Track** students must complete 24 credit (cr) hours of classroom graduate-level courses, 1 credit-hour of graduate seminar and successfully defend a thesis proposal (EVEN 5306 - 3 cr) and thesis (EVEN 5306 - 3 cr). (Total credit hours = 31).

**Research Project Track** students must complete 33 credit hours of classroom graduate-level courses, take 1 graduate seminar, and successfully defend a research project report (EVEN 5305 - 3 cr) (Total credit hours = 37).

**Course-Only Track** students must complete 36 credit hours of classroom graduate-level courses, and 1 credit of graduate seminar for a total of 37 credits. Students must also successfully pass a comprehensive exam.

The required core courses for MS 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)
- 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)

EVEN 5303\* - Advanced Topics in Environmental Engineering (3 cr)

\*MS students receiving funding from any active research grant or project can take internship/Co-Op using either EVEN 6304 or EVEN 5303 only once during their study after three semesters enrolled in the M.S. 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.

Click here to see the degree requirements