

ENVIRONMENTAL ENGINEERING

This program has been designed to build upon a student's undergraduate background and provide additional depth and breadth in the challenging Environmental and Water Resources Engineering. In addition to courses in engineering, technical electives may be chosen from a variety offered in other departments.

Department emphasis is on the one-year course-based Master of Environmental Engineering, summarized below. However, students with an interest in a multi-year, project-based Master of Science in Environmental Engineering, also summarized below, may explore options in the department to pursue this degree.

Upon completion of the Master in Environmental Engineering and Master of Science in Environmental Engineering, students will be able to

- Evaluate the results of a solution to an environmental engineering problem.
- Apply advanced concepts and principles to solve complex problems in a technical area appropriate to the practice of environmental engineering.
- Justify appropriate problem approaches and techniques for complex problems in a technical area appropriate to the practice of environmental engineering.
- Describe or Demonstrate professional responsibilities relevant to the practice of environmental engineering.

Requirements

Master of Environmental Engineering (p. 1)

Master of Science Environmental Engineering (p. 1)

Master of Environmental Engineering Requirements (Course-Based)

- 48 credit hours of course work as approved by the student's academic advisor.
- At least 36 credit hours must be 500-level from any department. Thus, no more than 12 credit hours may be 400-level.
- 20 credit hours of elective courses determined with approval of advisor.
- 28 credit hours of core courses:

Code	Title	Hours
CE 510	Environmental Engineering Externship	4
CE 562	Advanced Wastewater Treatment	4
CE 563	Advanced Water Treatment	4
CE 564	Aquatic Environmental Chemistry	4
CE 567	Applied Hydrologic Modeling	4
CE 573	Groundwater Analysis	4
CE 571	Environmental River Mechanics	4
or CE 568	Surface Water Quality Model'g	

Course of Study Prerequisite for Environmental Engineering Master's degrees

The required courses have the following prerequisite courses: CE 371 Hydraulic Engineering, CE 471 Water Resources Engineering, CE 460 Introduction to Environmental Engineering and CE 461 Environmental Engineering Laboratory. Students must also have completed a course in Organic Chemistry. Students without these requirements or equivalent will be required to take any missing prerequisites, and these prerequisites will not be counted in the 48 hours required for the Master's degree.

Master of Science in Environmental Engineering Requirements (Project-Based)

- 48 credit hours of course and project work as approved by the student's academic advisor.
- At least 36 credit hours must be 500-level from any department. Thus, no more than 12 credit hours may be 400-level.
- 24 credit hours of core courses, which include the following:

Code	Title	Hours
CE 562	Advanced Wastewater Treatment	4
CE 563	Advanced Water Treatment	4
CE 564	Aquatic Environmental Chemistry	4
CE 567	Applied Hydrologic Modeling	4
CE 573	Groundwater Analysis	4
CE 571	Environmental River Mechanics	4

- 16 credit hours of elective courses determined with approval of advisor
- 8 credit hours of project work determined with approval of advisor

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