

# CIVIL AND ENVIRONMENTAL ENGINEERING: RESEARCH, M.S.

## REQUIREMENTS

### MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (<http://guide.wisc.edu/graduate/#policiesandrequirements>), in addition to the program requirements listed below.

### NAMED OPTION REQUIREMENTS MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

#### Mode of Instruction Definitions

**Accelerated:** Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

**Evening/Weekend:** Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

**Face-to-Face:** Courses typically meet during weekdays on the UW–Madison Campus.

**Hybrid:** These programs combine face-to-face and online learning formats. Contact the program for more specific information.

**Online:** These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

### CURRICULAR REQUIREMENTS

#### Requirement Detail

Minimum Credit Requirement

Minimum Residence Credit Requirement

Minimum Graduate Coursework Requirement 15 credits must be graduate-level coursework. Details can be found in the Graduate School's Minimum Graduate Coursework (50%) policy (<https://policy.wisc.edu/library/UW-1244>).

Overall	3.00 GPA required.
Graduate GPA Requirement	This program follows the Graduate School's GPA Requirement policy ( <a href="https://policy.wisc.edu/library/UW-1203">https://policy.wisc.edu/library/UW-1203</a> ).
Other Grade Requirements	n/a
Assessments and Examinations	Pathway A, Thesis: A faculty committee will conduct a final examination on the thesis research. Pathway B, Independent Study: A faculty committee will review and approve the final report. A final examination is not required but may be requested by the faculty committee.
Language Requirements	No language requirements.

### REQUIRED COURSES

#### Pathway A—Thesis<sup>1</sup>

Students who wish to do advanced work and research in a well-defined area of specialization are encouraged to pursue this program.

This option requires a minimum of 30 credits of graduate work including:

- A minimum of 18 credits graduate-level coursework (numbered 300 and higher); at least of 9 of the 18 credits must be in Civil and Environmental Engineering (may include the seminar course with approval from the faculty advisor; may not include CIV ENGR 790) Some courses numbered 300+ may require special faculty approval.
- A minimum of one-credit seminar course (Discuss seminar options with faculty advisor.)
- A minimum of 6 credits of CIV ENGR 790 Master's Research or Thesis A faculty committee will conduct a final examination on the thesis research.

<sup>1</sup>

These pathways are internal to the program and represent different curricular paths a student can follow to earn this degree. Pathway names do not appear in the Graduate School admissions application, and they will not appear on the transcript.

#### Pathway B—Advanced Independent Study<sup>1</sup>

This pathway requires a minimum of 30 credits of graduate work including:

- A minimum of 21 credits graduate-level coursework (numbered 300 and higher); at least of 9 of the 21 credits must be in Civil and Environmental Engineering (may include the seminar course with approval from the advisor; may not include independent study or research courses) Some courses numbered 300+ may require special faculty approval.
- A minimum of one-credit seminar course. (Discuss seminar options with faculty advisor.)
- A minimum of 3 credits of CIV ENGR 790 Master's Research or Thesis or CIV ENGR 999 Advanced Independent Study A required written report based on the student's advanced independent study project does not have to meet UW–Madison Graduate School requirements for a thesis, but has to show independent thinking by the student. A faculty committee will review and approve the final report. A final examination is not required but may be requested by the faculty committee.

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### Pathway C—Master's <sup>1</sup> (for Students without Engineering Bachelor's Degrees)

This program is designed for students without engineering bachelor's degrees. Students will meet with their faculty advisor to determine the courses and total credits required to fulfill the deficiency requirements. As a general rule, students with more than 12 credits in deficiencies are not admitted to the program. Rather, they are encouraged to enroll as special students until more of their deficiencies are satisfied. Some of the deficiency course requirements may be completed after admission. The exact number of deficiency courses and credits completed before and after admission will be determined by the faculty advisor. All prerequisite courses must be taken for a letter grade. In addition to the total deficiency credit requirement, Pathway C requires a minimum of 30 credits of graduate work. Students can select either a Thesis Pathway or Advanced Independent Study Pathway, consistent with the requirements of Pathway A or Pathway B described above, to complete the non-deficiency requirements of Pathway C. Students should meet with their faculty advisor to determine which pathway is most appropriate for their degree plan. Deficiency credits cannot be applied to fulfill the 30 credit degree requirement.

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### Seminar Course Options

Code	Title	Credits
<b>Seminar Course Options</b>		
CIV ENGR 579	Seminar-Transportation Engineering	1
CIV ENGR/ ENVIR ST/ URB R PL 717	Water Resources Management Practicum Planning Seminar I	1
CIV ENGR/ ENVIR ST/ URB R PL 718	Water Resources Management Practicum Planning Seminar II	2
CIV ENGR 909	Graduate Seminar - Environmental Chemistry & Technology	1
CIV ENGR/ ATM OCN/BOTANY/ ENVIR ST/GEOSCI/ ZOOLOGY 911	Limnology and Marine Science Seminar	1
CIV ENGR 919	Seminar-Hydraulic Engineering and Fluid Mechanics	1
CIV ENGR 929	Seminar-Environmental Engineering	1
CIV ENGR 939	Geotechnical Engineering Seminar	1
CIV ENGR 949	Seminar-Structural Engineering	1

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