

CIVIL AND ENVIRONMENTAL ENGINEERING: RESEARCH, MS

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum degree requirements (<https://guide.wisc.edu/graduate/#requirements>) and policies (<https://guide.wisc.edu/graduate/#policies>), 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 30 credits

Minimum Residence Credit Requirement 16 credits

Minimum Graduate Coursework Requirement 15 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: <https://policy.wisc.edu/library/UW-1244> (<https://policy.wisc.edu/library/UW-1244/>).

Overall Graduate GPA Requirement	3.00 GPA required. Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: https://policy.wisc.edu/library/UW-1203 (https://policy.wisc.edu/library/UW-1203/).
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—Thesis¹

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:

Code	Title	Credits
Graduate Level Coursework (numbered 300 and higher with the Grad 50% attribute)		
	Students must complete 18 credits, including at least 9 credits in Civil and Environmental Engineering (CIV ENGR). This may include the seminar course with approval from the faculty advisor. May not include CIV ENGR 790. ²	18
Seminar		
	Discuss seminar options with faculty advisor. See options below.	1
Research or Thesis		
	A faculty committee will conduct a final examination on the thesis research. Students must complete 6 credits of following:	6
CIV ENGR 790	Master's Research or Thesis	
Additional Coursework		
	In consultation with advisor, complete coursework to reach the minimum of 30 credit requirement.	5
Total Credits		30

¹ 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.

² Some courses numbered 300 or above may require special faculty approval.

Pathway B—Advanced Independent Study¹

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

Code	Title	Credits
Graduate Level Coursework (numbered 300 and higher with the Grad 50% attribute)		

Students must complete 21 credits, including at least 9 credits in Civil and Environmental Engineering (CIV ENGR). This may include the seminar course with approval from the advisor. May not include independent study or research courses.²

Seminar

Discuss seminar options with faculty advisor. See options below.

Research or Thesis

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. Students complete 3 credits from following:

CIV ENGR 790 Master's Research or Thesis
or CIV ENGR 999 Advanced Independent Study

Additional Coursework

In consultation with advisor, complete coursework to reach the minimum of 30 credit requirement.

Total Credits **30**

Seminar Course Options

Code	Title	Credits
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 760	Research Methods in Construction Engineering Management	1
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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Pathway C—Master's¹ (for Students without Engineering Bachelor's Degrees)

This program is designed for students without an engineering bachelor's degree. Prior to beginning the program, the student will meet with their faculty advisor to determine the courses and total credits required to fulfill the deficiency requirements. Generally, a student with more than 12 credits in deficiencies is not admitted to the program. Rather, they are encouraged to enroll as a University Special student until most of their deficiencies are satisfied. Some 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 Thesis Pathway A or Advanced Independent Study Pathway B, consistent with the requirements 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 satisfy the minimum credit requirement.

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