

# CIVIL AND ENVIRONMENTAL ENGINEERING: ENVIRONMENTAL ENGINEERING, MENG

This is a named option in the Civil and Environmental Engineering MEng (<http://guide.wisc.edu/graduate/civil-environmental-engineering/civil-environmental-engineering-meng/#text>).

The fully online Master of Engineering named option in Environmental Engineering (MEng) includes a full curriculum of courses incorporating the latest research and practices in water supply, wastewater reclamation and reuse, resource recovery, and urban storm water management. The MEng degree has been developed to give practicing environmental engineers and scientists the skills needed to meet contemporary and future challenges. For more information about the online MEng degree, visit the program website (<https://pdc.wisc.edu/degrees/environmental-engineering/>).

## ADMISSIONS

Please consult the table below for key information about this degree program's admissions requirements. The program may have more detailed admissions requirements, which can be found below the table or on the program's website.

Graduate admissions is a two-step process between academic programs and the Graduate School. **Applicants must meet the minimum requirements (<https://grad.wisc.edu/apply/requirements/>) of the Graduate School as well as the program(s).** Once you have researched the graduate program(s) you are interested in, apply online (<https://grad.wisc.edu/apply/>).

Requirements	Detail
Fall Deadline	June 15
Spring Deadline	November 15
Summer Deadline	March 15
GRE (Graduate Record Examinations)	Not required.
English Proficiency Test	Every applicant whose native language is not English, or whose undergraduate instruction was not exclusively in English, must provide an English proficiency test score earned within two years of the anticipated term of enrollment. Refer to the Graduate School: Minimum Requirements for Admission policy: <a href="https://policy.wisc.edu/library/UW-1241">https://policy.wisc.edu/library/UW-1241</a> ( <a href="https://policy.wisc.edu/library/UW-1241/">https://policy.wisc.edu/library/UW-1241/</a> ).
Other Test(s) (e.g., GMAT, MCAT)	n/a

Letters of Recommendation Required 3

## APPLICATION PROCESS AND REQUIREMENTS

All applicants must meet the Graduate School's admission requirements (<http://grad.wisc.edu/admissions/requirements/>) to be considered for admission. Departmental admission is by committee review. Any application material submitted after the deadline is not guaranteed to be reviewed by the graduate admissions committee.

In addition, applicants must also meet the department's requirements listed below to be considered for admission:

### Grades

A minimum undergraduate grade-point average (GPA) of 3.00 (on a 4.00 scale) on the equivalent of the last 60 semester hours (approximately two years of work) or a master's degree with a minimum cumulative GPA of 3.00 is required. Applicants from an international institution must demonstrate strong academic achievement comparable to a 3.00 for an undergraduate or master's degree. The Graduate School will use your institution's grading scale. Do not convert your grades to a 4.00 scale.

On a case-by-case basis the admissions committee may consider an applicant with a GPA lower than 3.00 for applicants with exceptional circumstances, if supported by a strong career track and references.

### Degree

A bachelor's degree from an ABET-accredited engineering program or from a recognized international institution is required.

On a case-by-case basis the admissions committee may consider an applicant with a non-ABET accredited BS degree depending on the applicant's academic record and career track.

### Funding

No financial support from the university is available to students in the online MEng in Civil and Environmental Engineering-Environmental Engineering degree program.

## COMPLETE APPLICATION

A complete graduate application is required before an application will be reviewed by the faculty. A complete graduate application contains the following:

### Graduate School Application

Applicants must submit an online application to the UW-Madison Graduate School. See Graduate School Admissions (<https://grad.wisc.edu/admissions/>) to apply.

### Statement of Purpose

Submit a statement of purpose of 1,000 words or less in the online application. This statement should cover your technical areas of interest, coursework emphasis, work experience, professional goals, and any other items relevant to your qualifications for graduate school. See the Graduate School for additional guidelines for the Statement of Purpose (<https://grad.wisc.edu/apply/prepare/>) (scroll to bottom of page).

### Three Letters of Recommendation

Three letters of recommendation must be submitted through the online application. These letters should be from people who can judge the

applicant's academic and/or work performance. See the Graduate School for FAQs (<https://grad.wisc.edu/apply/>) regarding these letters.

### Academic Transcripts

Upload the most recent copies of your transcripts to the online application, from each institution attended. Study abroad transcripts are not required if coursework is reflected on the degree granting university's transcript. Unofficial copies of transcripts will be accepted for departmental review. If the applicant is recommended for admission, then the Graduate School will follow-up with instructions for official transcript submission. Please do not send transcripts or any other application materials to the Graduate School or the Department of Civil and Environmental Engineering unless requested.

### Resume/Curriculum Vitae

Upload your most recent resume or curriculum vitae in the online application.

### English Proficiency Score

Applicants whose native language is not English, or whose undergraduate instruction was not in English, must provide an English proficiency test score. Scores are accepted if they are within two years of the start of the admission term. Self-reported exam information is acceptable during departmental review; however, if you are recommended for admission, official test scores must be sent directly to the Graduate School from the testing body. See Graduate School Admission Requirements (<http://grad.wisc.edu/admissions/requirements/>) for more information on the English proficiency requirement. (NOTE: TOEFL scores may be sent electronically via ETS using institution code 1846)

### Application Fee

A one-time application fee is required. See the Graduate School frequently asked questions (<https://grad.wisc.edu/apply/>) for fee information. Fee grants are offered by the Graduate School on a limited basis and under certain conditions, as outlined here (<https://grad.wisc.edu/apply/fee-grant/>). The department does not offer an application fee waiver due to the large volume of applications received.

## FUNDING

## FUNDING

### GRADUATE SCHOOL RESOURCES

Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid. Further funding information (<https://grad.wisc.edu/funding/>) is available from the Graduate School. Be sure to check with your program for individual policies and restrictions related to funding.

### PROGRAM INFORMATION

Students enrolled in this program are not eligible to receive tuition remission from graduate assistantship appointments at this institution.

## REQUIREMENTS

## MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (<http://guide.wisc.edu/graduate/>

#policiesandrequirements text), in addition to the program requirements listed below.

## NAMED OPTION REQUIREMENTS MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
No	No	Yes	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: <a href="https://policy.wisc.edu/library/UW-1244">https://policy.wisc.edu/library/UW-1244</a> ( <a href="https://policy.wisc.edu/library/UW-1244/">https://policy.wisc.edu/library/UW-1244/</a> ).
Overall Graduate GPA Requirement	3.00 GPA required. Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: <a href="https://policy.wisc.edu/library/UW-1203">https://policy.wisc.edu/library/UW-1203</a> ( <a href="https://policy.wisc.edu/library/UW-1203/">https://policy.wisc.edu/library/UW-1203/</a> ).
Other Grade Requirements	Courses with grades D and F do not satisfy degree requirements. Refer to the Graduate School: Failing Grades policy: <a href="https://policy.wisc.edu/library/UW-1210">https://policy.wisc.edu/library/UW-1210</a> ( <a href="https://policy.wisc.edu/library/UW-1210/">https://policy.wisc.edu/library/UW-1210/</a> ).
Assessments and Examinations	No formal examination required.
Language Requirements	No language requirements.

## REQUIRED COURSES

Code	Title	Credits
<b>Core Courses</b>		
CIV ENGR 820	Hydraulics and Applied Fluid Mechanics for Environmental Engineers	3
CIV ENGR 823	Environmental Engineering Design Project	3
CIV ENGR 929	Seminar-Environmental Engineering	1
Take at least two of the following three courses		6-9
CIV ENGR 721	Biological Principles of Environmental Engineering	
CIV ENGR 722	Chemical Principles of Environmental Engineering	
CIV ENGR 723	Energy Principles of Environmental Engineering	
Take at least one of the following two courses		3-6
CIV ENGR 821	Environmental Engineering: Biological Treatment Processes	
CIV ENGR 822	Environmental Engineering: Physical/Chemical Treatment Process	
<b>Electives</b>		
Other courses may be applicable with faculty advisor approval		
CIV ENGR 320	Environmental Engineering	3
CIV ENGR 414	Hydrologic Design	3
CIV ENGR 423	Air Pollution Effects, Measurement and Control	3
CIV ENGR 426	Design of Wastewater Treatment Plants	3
CIV ENGR 427	Solid and Hazardous Wastes Engineering	3
CIV ENGR 428	Water Treatment Plant Design	3
CIV ENGR 522	Hazardous Waste Management	3
CIV ENGR 525	Case Studies Exploring Infrastructure Sustainability and Climate Change	3
CIV ENGR 621	Biological Treatment Process Modeling	1
CIV ENGR 629	Special Topics in Environmental Engineering	1-3
CIV ENGR 699	Independent Study	1-6
CIV ENGR 729	Environmental Sustainability Tools	3
E P D 690	Special Topics in Engineering Professional Development	1-3
E P D 701	Writing for Professionals	1
E P D 702	Professional Presentations	1
E P D 708	Creating Breakthrough Innovations	1
<b>Total Credits</b>		<b>30</b>

Students in this program may not take courses outside the prescribed curriculum without faculty advisor and program director approval. Students in this program cannot enroll concurrently in other undergraduate or graduate degree programs.

## POLICIES

### GRADUATE SCHOOL POLICIES

The Graduate School's Academic Policies and Procedures (<https://grad.wisc.edu/acadpolicy/>) provide essential information regarding general university policies. Program authority to set degree policies beyond the minimum required by the Graduate School lies with the degree program faculty. Policies set by the academic degree program can be found below.

### NAMED OPTION-SPECIFIC POLICIES

#### PRIOR COURSEWORK

##### Graduate Credits Earned at Other Institutions

With program approval, students may transfer no more than 14 credits of graduate coursework from other institutions. Approved credits will be allowed to count toward the minimum credit requirement and the minimum graduate coursework requirement, but will not count toward the minimum graduate residence credit requirement. Coursework earned ten or more years prior to admission to a master's degree is not allowed to satisfy requirements.

##### Undergraduate Credits Earned at Other Institutions or UW-Madison

Upon approval from a student's graduate advisor and the program's Admissions Committee, students may transfer up to 7 credits from another institution or numbered 300 or above from the undergraduate career completed at UW-Madison. Exceptions to this limit must be approved by the Graduate School. Transfer credits from other institutions must be equivalent to the rigor of UW-Madison Civil and Environmental Engineering courses numbered 300 and above. These credits are not allowed to count toward the 50% graduate coursework minimum unless numbered 700 or above from UW-Madison. The credits are noted on the transcript in the graduate career as transfer credits, but the courses remain in the undergraduate career if taken at UW-Madison. Refer to the Graduate School: Transfer Credits for Prior Coursework (<https://policy.wisc.edu/library/UW-1216/>) policy.

##### Credits Earned as a Professional Student at UW-Madison (Law, Medicine, Pharmacy, and Veterinary careers)

Refer to the Graduate School: Transfer Credits for Prior Coursework (<https://policy.wisc.edu/library/UW-1216/>) policy.

##### Credits Earned as a University Special student at UW-Madison

With program approval students may transfer no more than 9 credits of coursework numbered 300 or above taken as a UW-Madison special student. Coursework earned ten or more year prior to admission to a master's degree is not allowed to satisfy requirements.

#### PROBATION

Refer to the Graduate School: Probation (<https://policy.wisc.edu/library/UW-1217/>) policy.

## ADVISOR / COMMITTEE

Refer to the Graduate School: Advisor (<https://policy.wisc.edu/library/UW-1232/>) and Graduate School: Committees (Doctoral/Master's/MFA) (<https://policy.wisc.edu/library/UW-1201/>) policies.

## CREDITS PER TERM ALLOWED

15 credits

## TIME LIMITS

Refer to the Graduate School: Time Limits (<https://policy.wisc.edu/library/UW-1221/>) policy.

## GRIEVANCES AND APPEALS

These resources may be helpful in addressing your concerns:

- Bias or Hate Reporting (<https://doso.students.wisc.edu/bias-or-hate-reporting/>)
- Graduate Assistantship Policies and Procedures (<https://hr.wisc.edu/policies/gapp/#grievance-procedure>)
- Hostile and Intimidating Behavior Policies and Procedures (<https://hr.wisc.edu/hib/>)
  - Office of the Provost for Faculty and Staff Affairs (<https://facstaff.provost.wisc.edu/>)
- Employee Assistance (<http://www.eao.wisc.edu/>) (for personal counseling and workplace consultation around communication and conflict involving graduate assistants and other employees, post-doctoral students, faculty and staff)
- Employee Disability Resource Office (<https://employeeabilities.wisc.edu/>) (for qualified employees or applicants with disabilities to have equal employment opportunities)
- Graduate School (<https://grad.wisc.edu/>) (for informal advice at any level of review and for official appeals of program/departmental or school/college grievance decisions)
- Office of Compliance (<https://compliance.wisc.edu/>) (for class harassment and discrimination, including sexual harassment and sexual violence)
- Office Student Assistance and Support (OSAS) (<https://osas.wisc.edu/>) (for all students to seek grievance assistance and support)
- Office of Student Conduct and Community Standards (<https://conduct.students.wisc.edu/>) (for conflicts involving students)
- Ombuds Office for Faculty and Staff (<http://www.ombuds.wisc.edu/>) (for employed graduate students and post-docs, as well as faculty and staff)
- Title IX (<https://compliance.wisc.edu/titleix/>) (for concerns about discrimination)

## Civil and Environmental Engineering Grievance Procedures

Students who feel that they have been treated unfairly have the right to a prompt hearing of their grievance. Such complaints may involve course grades, classroom treatment, advising, various forms of harassment, or other issues. Any student or potential student may use these procedures.

- The student should speak first with the person toward whom the grievance is directed. In most cases, grievances can be resolved at this level.
- Should a satisfactory resolution not be achieved, the student should contact the program's Grievance Advisor to discuss the grievance.

Currently, the Civil and Environmental Engineering Grievance Advisors are:

**Pavana Prabhakar**, Professor and Associate Chair for Graduate Programs  
 pavana.prabhakar@wisc.edu 2210 Engineering Hall Phone: (608) 265-7834

**Greg Harrington**, Professor and CEE Department Chair  
 gwharrin@wisc.edu 2205 Engineering Hall Phone: (608) 695-3380

If the student prefers to talk with someone outside of the Civil and Environmental Engineering department, contact:

**Joanna Gurstelle**, Assistant Dean

The Assistant Dean for Graduate Affairs ([enr-dean-graduateaffairs@enr.wisc.edu](mailto:enr-dean-graduateaffairs@enr.wisc.edu)) provides overall leadership for graduate education in the College of Engineering and is a point of contact for graduate students who have concerns about education, mentoring, research, or other difficulties.

- The Grievance Advisor is responsible for facilitating any complaints or issues of students. The Grievance Advisor first attempts to help students informally address the grievance prior to any formal complaint. Students are also encouraged to talk with their faculty advisors regarding concerns or difficulties if necessary. University resources for sexual harassment concerns can be found on the UW Office of Compliance website and are included in the next section.
- If the issue is not resolved to the student's satisfaction the student can submit the grievance to the Grievance Advisor in writing, within 60 calendar days of the alleged unfair treatment.
- On receipt of a written complaint, a faculty committee will be convened by the Grievance Advisor to manage the grievance. The program faculty committee will obtain a written response from the person toward whom the complaint is directed. This response will be shared with the person filing the grievance.
- The faculty committee will determine a decision regarding the grievance. The Grievance Advisor will report on the action taken by the committee in writing to both the student and the party toward whom the complaint was directed within 15 working days from the date the complaint was received.
- At this point, if either party (the student or the person toward whom the grievance is directed) is unsatisfied with the decision of the faculty committee, the party may file a written appeal. Either party has 10 working days to file a written appeal to the College of Engineering.
- Documentation of the grievance will be stored for at least 7 years. Significant grievances that set a precedent will be stored indefinitely.

The Graduate School has established policies governing student conduct, academic dishonesty, and sexual and racial harassment. The Graduate School also has procedures for students wishing to appeal a grievance decision made at the college level. These policies are described in the Academic Guidelines.

## OTHER

Students are strongly discouraged to pursue positions as Project Assistants, Teaching Assistants or Research Assistants during their time in this program. Students in this program will not receive the tuition remission that is typically part of the compensation package for a graduate assistantship.

## PROFESSIONAL DEVELOPMENT

### PROFESSIONAL DEVELOPMENT GRADUATE SCHOOL RESOURCES

Take advantage of the Graduate School's professional development resources (<https://grad.wisc.edu/pd/>) to build skills, thrive academically, and launch your career.

## PEOPLE

### PEOPLE CIVIL AND ENVIRONMENTAL ENGINEERING

Professors Harrington (chair), Ahn, Hanna, Hurley, Li, Likos, Loheide, McMahon, Noguera, Noyce, Park, Parra-Montesinos, Ran, Remucal, Russell, Schauer, Wu; Associate Professors Block, Fratta, Ginder-Vogel, Hicks, Pincheira, Prabhakar, Sone, Tinjum, Wright; Assistant Professors Blum, Chen, Hampton, Pujara, Qin, Wang, Wei, Zhu; M.Eng Program Director Carlson. See also CEE faculty (<http://directory.engr.wisc.edu/cee/faculty/>).

### GEOLOGICAL ENGINEERING

Professors Tinjum (Director) (Civil and Environmental Engineering), Feigl (Geoscience), Goodwin (Geoscience), Hard (Wisconsin Geological and Natural History Survey), Likos (Civil and Environmental Engineering), Loheide (Civil and Environmental Engineering), Tikoff (Geoscience), Wu (Civil and Environmental Engineering); Associate Professors Cardiff (Geoscience), Ferrier (Geoscience), Fratta (Civil and Environmental Engineering), Ginder-Vogel (Civil and Environmental Engineering), Hicks (Civil and Environmental Engineering), Sone (Civil and Environmental Engineering), Zoet (Geoscience); Assistant Professors Hampton (Civil and Environmental Engineering), Golos (Geoscience), Zahasky (Geoscience). See also GLE faculty (<https://engineering.wisc.edu/departments/civil-environmental-engineering/research/geological-engineering/>).

### ENVIRONMENTAL CHEMISTRY AND TECHNOLOGY

Professors Hurley (Civil and Environmental Engineering), Bertram (Chemistry), Bleam (Soil Science), Harrington (Civil and Environmental Engineering), Karthikeyan (Biological Systems Engineering), McMahon (Civil and Environmental Engineering/Bacteriology), Roden (Geoscience), Root (Chemical and Biological Engineering), Schauer (Civil and Environmental Engineering), Thompson (Biological Systems Engineering); Associate Professors Ginder-Vogel (director; Civil and Environmental Engineering), Remucal (Civil and Environmental Engineering), Whitman (Soil Science); Assistant Professors Anantharaman (Bacteriology), Majumder (Bacteriology), Qin (Civil and Environmental Engineering), Wei (Civil and Environmental Engineering). See also ECT Faculty (<https://engineering.wisc.edu/departments/civil-environmental-engineering/research/environmental-chemistry-technology/>).