## **DOCTOR OF PHILOSOPHY** IN THE FIELD OF CIVIL AND **ENVIRONMENTAL ENGINEERING**

Environmental engineering students use one of the world's largest wastewater treatment plants as a real-world laboratory to improve the water quality of the Potomac River and the Chesapeake Bay watershed. Structural engineering students study earthquake engineering, extreme event design of structures, and bridge design on a state-of-the-art, six-degrees-of-freedom earthquake simulator.

The PhD program requires a minimum of 30 credits in a formal program of study at the graduate level beyond master's study or, for students without a master's degree, a minimum of 54 credits in a formal program of study at the graduate level beyond the baccalaureate is required. Graduate students can pursue their degrees in one of the following focus areas: engineering mechanics, environmental engineering, geotechnical engineering, structural engineering, transportation safety engineering, and water resources engineering.

The doctoral program aims to educate highly qualified researchers who will enhance fundamental knowledge and produce technological innovations through original research and development. Our location and relationships with companies and government agencies in the Washington, DC, area allow for collaborative research opportunities that greatly increase our graduates' job prospects.

## **ADMISSIONS**

Admissions Fall - January 15 Deadlines:

Spring - September 1

Summer \* - March 1 (non-F1 visa seeking applicants)

Standardized The GRE General Test is optional for all applicants. For test scores: applicants who want to submit scores, they must be submitted officially from ETS using the institutional

code 5246.

The Test of English as a Foreign Language (TOEFL). the academic International English Language Testing System (IELTS), or the PTE Academic is required of all applicants except those who hold a bachelor's, master's, or doctoral degree from a college or university in the United States or from an institution located in a country in which English is the official language, provided English was the language of instruction. Minimum scores:

- Academic IELTS: an overall band score of 6.0 with no individual score below 5.0; applicants requesting funding consideration must have an overall band score of 7.0 with no individual score below 6.0; or

- TOEFL: 550 on paper-based or 80 on Internetbased; applicants requesting funding consideration must have 600 on paper-based; or 100 on Internetbased; or

- PTE Academic: 53; applicants requesting funding consideration must have 68.

Recommendations required. If possible, required:

one of these recommendations should be from your advisor at the institution from which you earned your highest degree.

Prior academic records:

Transcripts are required from all colleges and universities attended, whether or not credit was earned, the program was completed, or the credit appears as transfer credit on another transcript. Unofficial transcripts from all colleges and universities attended must be uploaded to your online application. Official transcripts are required only of applicants who are offered admission.

If academic records are in a language other than English, a copy in the original language and an English language translation must be uploaded. Transcript evaluations should not be uploaded. Applicants who have earned a degree from an Indian university are required to submit individual semester marksheets.

purpose:

Statement of Please write a comprehensive essay of 400 to 600 words, indicating your primary and supporting fields of study, your specialized interests, and the general subject area of your planned dissertation or professional project.

Admission to the PhD program requires a bachelor's

Additional

requirements or master's degree, evidence of a strong academic or relevant professional background, course work designated by the department as pertinent to the field of study, and capacity for research. Applicants whose highest earned degree is a bachelor's degree should have a grade-point average of at least 3.3 (on a 4.0 scale). Applicants whose highest earned degree is a master's degree should have a grade-point average of at least 3.4.

> All applicants must choose an area of focus that most closely matches their interests and note this on the online application. Applicants to the PhD program should identify one to three faculty members whose research interests most closely match their own and note this on the online application. All applicants must submit a resumé or CV.

International Please follow this link - https://

applicants graduate.admissions.gwu.edu/internationalonly: student-application-requirements (https://

student-application-requirements (https://graduate.admissions.gwu.edu/international-student-application-requirements/) - to review the International Applicant Information carefully for details on required documents, earlier deadlines for applicants requiring an I-20 or DS-2019 from GW, and English language requirements.

\* A limited number of doctoral applicants are accepted for the summer. Please contact the admissions office for details.

For additional information about the admissions process visit the SEAS Admissions Frequently Asked Questions (https://graduate.engineering.gwu.edu/admissions-frequently-asked-questions/) page.

Contact for questions:

engineering@gwu.edu 202-994-1802 (phone) 202-994-1651 (fax)

Hours: 9:00 am to 5:00 pm, Monday through Friday

## **REQUIREMENTS**

The following requirements must be fulfilled:

The general requirements stated under School of Engineering, Doctoral Program Regulations (http://bulletin.gwu.edu/engineering-applied-science/#Doctor\_of\_Philosophy).

Students with an MS degree must take a minimum of 30 credits, of which at least 18 must be from graduate courses, and at least 12 must be dissertation research credits. The courses to be taken by the student must be approved by the student's advisor. Students with a BS degree must take a minimum of 54 credits, of which at least 42 must be graduate course credits, and at least 12 must be dissertation research credits. The courses to be taken by the student must be approved by the student's advisor. In some cases, particularly when the student undertakes a doctoral program in a field other than that in which the earlier degree was earned, the program of study exceeds the minimum number of credits.

No specific courses are required; the student and advisor design the curriculum to meet the student's needs and goals.

## **Other requirements**

Qualifying examination—Administered twice a year, the
examination covers subject matters at both the master's and
doctoral levels. Students should prepare for comprehensive
questioning on all subject matters regardless of any particular
course included in the actual doctoral coursework load.

Student should contact the department for additional information and requirements

Visit the program website (https://www.cee.seas.gwu.edu/phdcivil-and-environmental-engineering/) for additional information.