

CIVIL ENGINEERING, PHD

More Information: <https://engineering.case.edu/civil-and-environmental-engineering>

Degree: Doctor of Philosophy (PhD)

Field of Study: Civil Engineering

Program Overview

The Civil Engineering Ph.D. degree program offers concentrations in Structural Engineering, Geotechnical Engineering, Environmental Engineering, and Engineering Mechanics to prepare students for careers in industry, professional practice, research, and teaching. Experience has shown that job opportunities are excellent for students who receive advanced degrees in Civil Engineering from Case Western Reserve University. Recent advanced degree recipients have found positions as faculty members in universities, engineers at consulting firms, state and federal agencies, aerospace firms, and the energy industry, and started their own business.

Each student's program of course work and research is tailored to their interests in close consultation with a faculty advisor. For students working toward the Doctor of Philosophy degree, a research dissertation is required.

All students pursuing graduate studies in the Department of Civil and Environmental Engineering must abide by the academic regulations of the School of Graduate Studies and the Case School of Engineering and approved by the student's faculty advisor in the Department of Civil and Environmental Engineering

Admission

Requirements for admission include a strong record of scholarship in a completed bachelor's degree program in the field of Civil or Environmental Engineering, and/or master's degree in civil and environmental engineering or related fields and fluency in written and spoken English.

Students with a degree other than Civil or Environmental Engineering will be evaluated for admittance on a case by case basis by the department for consideration of provisional admittance. A provisional graduate student is expected to complete appropriate course work and to meet the performance standards of the School of Graduate Studies within the first academic year of study.

Advising

Upon admission to the graduate program, each Ph.D. student is selected by and assigned to a research advisor to provide mentorship on planning a Ph.D. program of study (Academic Program). For students with no research advisor identified, a temporary assignment of academic advisor will be made by the Department Chairperson based on the student's academic and research interests as identified at the time of application.

During the first two semesters in the program, it is strongly suggested that each student meet with various members of faculty to discuss academic objectives/goals and research opportunities. In order to complete the research component of their respective degree program, each student must identify a faculty member who is willing to serve as the student's research advisor. The research advisor will also serve as the student's permanent academic advisor if they are a primary member of the department faculty. If, however, the research advisor is not a

primary member of the department faculty, the student is required to find a permanent academic advisor from the department faculty. For students enrolled in the PhD program, the research advisor is commonly known as the "dissertation" advisor.

Each student is required to file an Academic Program, which must be approved by the student's advisor and the Department Chairperson, and submitted to the Dean of Graduate Studies. Full-time PhD students should choose a research advisor and they can take Ph.D. qualifying exams after completing the required credit hours of coursework. The Ph.D. qualifying exam is conducted by a dissertation committee charged with evaluating the preliminary research and future research plan. The dissertation committee is formed by the student in conjunction with their dissertation advisor. Upon passing the qualifying exam, the Ph.D. student will advance to Ph.D. candidacy.

The dissertation committee consists of at least four members, which shall consist of the student's academic advisor and additional faculty members recommended by the advisor. For the PhD program, the minimum number of faculty members on the dissertation guidance committee is four, and at least two of the committee members must be within the CEE program, at least one from outside the CEE department). The chairperson of the dissertation guidance committee is normally the candidate's research advisor.

Students may change advisors for a variety of reasons, of which one of the most common is a change of the student's field of interest. It should be noted that a change in research advisor may require that the student start a new research project, which could result in delaying graduation. It is the responsibility of the student to inform the CEE Office of Student Affairs in the event of a change in advisor.

PhD Policies

For PhD policies and procedures, please review the School of Graduate Studies section of the General Bulletin.

Program Requirements

See academic requirements of the School of Graduate Studies and Case School of Engineering.