

PH.D. IN ENGINEERING (CIVIL ENGINEERING)

OVERVIEW

Our PhD program is geared towards students interested in an academic path or an advanced research based career. Most of our PhD students joining the program hold an MS degree and they are able to finish their program within three to four years. Many of our PhD students have published their research in peer reviewed journals and some have also obtained teaching skills to prepare them better for an academic position.

ADMISSIONS REQUIREMENTS

An MS degree in an engineering related field is desirable. GRE and TOEFL scores are also required. See College of Engineering admissions information for details.

PROGRESS TOWARD DEGREE

To be formally admitted to candidacy for the doctoral degree, students must first pass the qualifying examination. The purpose of the qualifying exam is to determine whether a student possesses the necessary potential to complete doctoral degree requirements. The exam consists of two parts – a written examination and an oral proposal defense. The written exam is given in the middle of the fall or spring semester. It is intended to test the breadth and depth of the student's understanding of fundamentals and the most important and basic elements of the broad area of graduate studies in which the student is specializing.

The oral defense of the proposed dissertation research is held before an advisory committee of at least five faculty members. Prior to the defense, students submit a written proposal to the committee. The defense consists of a brief presentation of the written proposal followed by a question and answer session. During the exam, the committee will assess the appropriateness of the proposed research for a doctoral dissertation and the student's ability to successfully complete it. Students must defend their proposal in the fall or spring semester following passage of the written exam. Upon passing both parts of the qualifying exam, students may apply for admission to candidacy.

After completion of a minimum of 45 credit hours of course work beyond the bachelor's degree and 45 credit hours of dissertation research, doctoral candidates must prepare a written dissertation documenting their research results. Final approval for graduation is contingent upon a successful oral defense of the dissertation before the advisory committee in a public forum.

Students applying for admission are expected to have completed a B.S. in civil engineering. Those with degrees in other areas of engineering or science will have to take certain undergraduate courses to prepare for graduate courses. These courses will be identified prior to admission and will appear on the student's plan of study.

PROGRAM REQUIREMENTS

The doctoral degree requires a minimum of 90 credit hours, of which 45 credit hours are for course work and 45 credit hours are for dissertation research. To be formally admitted to candidacy for the degree, however,

doctoral students must first pass a qualifying examination. All Ph.D. students should note that admission to the doctoral program does not constitute admission to candidacy. The doctoral program is normally a full-time program throughout all of the course work and the dissertation. The department of civil engineering does not encourage part-time studies in the Ph.D. program.

For the Ph.D. degree, a minimum of 60 graduate credit hours beyond the M.S.C.E. degree (90 credit hours beyond the B.S. degree) are required, of which at least 12 credit hours are for graduate course work (largely departmental), an additional three credit hours for graduate level mathematics course work, and 45 credit hours for dissertation research under the supervision of a full-time faculty member of the department of civil engineering. A minimum of 45 credit hours beyond the M.S. must be completed at The University of Toledo.

To be awarded the Ph.D. degree, the student must have at least a B average (minimum GPA of 3.0) for all credits in the program of study. Only credit hours obtained with a letter grade of "C" or higher, or an "S" grade for the limited number of classes offered on a satisfactory or unsatisfactory basis, will fulfill degree requirements. In addition, the student must be admitted to doctoral candidacy and pursue an original research problem. The research must be completed and the dissertation written and successfully defended in public before the Ph.D. degree is conferred.