

Doctor of Philosophy in Civil Engineering (Masters Entry)

About This Program

Doctor of Philosophy in Civil Engineering is a research oriented degree and, as such, requires the candidate to successfully carry out original and independent research in a civil engineering area acceptable to the civil engineering faculty. In addition to research, student's PhD advisor and PhD Committee will evaluate the student's fundamental knowledge of the master's core courses and determine the required coursework. A total of nine (9) hours of dissertation courses (CE 6399, 6699, or 6999) must be taken; at least three (3) of those hours must be in the semester of graduation.

Competencies

1. **Fundamental Knowledge:** graduates will command profound basic and applied knowledge in their specialty area within their Civil Engineering Program (CEP) interest area.
2. **Independent Abilities:** graduates will have the ability to conduct a major independent and original research study that includes gathering of information, gaining an understanding of the process of academic or commercial exploitation of research results, demonstrating an understanding of contemporary research issues, effective project management, synthesis and evaluation, and appropriate dissemination of research findings
3. **Critical Thinking:** graduates will have a profound ability to critique and synthesize literature, review results and to apply knowledge gained from literature to develop new ideas, to design and evaluate scientific investigations, and to assess, interpret and understand data related to their specialty area within their CEP interest area.
4. **Advanced Knowledge:** graduates will demonstrate profound mastery of the subject matter at a deeper theoretical and applied level well beyond fundamental knowledge gained in the undergraduate course sequence and the higher-level knowledge gained in the master's level course sequence.
5. **Effective Communication:** graduates will have the ability to construct coherent arguments and articulate ideas clearly to an audience, through a variety of techniques, constructively defend research outcomes, justify their research to the profession and promote the public understanding of their research fields.
6. **Professional Development:** a student graduating with a doctoral degree in civil engineering is expected to demonstrate interest in pursuing life long learning by attaining professional licenses, and obtaining professional development hours by attendance at conferences, higher educational classes, short courses and seminars, conducting classes, and publishing.

Admissions Criteria

Performance on the GRE will not be the sole criterion for admitting applicants or the primary criterion to deny admission to the program. In cases where GRE performance is relatively poor all other qualifications presented by the applicant will be carefully evaluated for evidence of potential for success.

UNCONDITIONAL ADMISSION

A student must meet the following requirements for unconditional admission:

1. A Master's Degree or at least 30 hours of graduate coursework in Civil Engineering. (Applicant with a Master's Degree in another discipline is considered, subject to satisfactory completion of deficiency courses for the CE area of specialization.)
2. No specific GPA requirement (application considered as a whole). However, a graduate coursework GPA of 3.5 on a 4.0 scale, as calculated by the Graduate School, is typical of a successful applicant.
3. A minimum score of 158 on the GRE Quantitative section and 148 on the GRE Verbal section is typical of a successful applicant.
4. A minimum score of 79 on the TOEFL iBT, or a minimum score of 6.5 on the IELTS, if English is not the applicant's native language. International applicants who have successfully completed a bachelor's degree from an institution in the United States and are not seeking funding as a Graduate Teaching Assistant are not required to meet this requirement.
5. Favorable letters of recommendation from people familiar with the applicant's academic work and/or professional work.

PROBATIONARY ADMISSION

If applicants do not meet a majority of standards for unconditional admission outlined above, they may be considered for probationary admission after careful examination of their application materials. Probationary admission may require that the applicant receive a B or better in at least their first 9 hours of graduate coursework applicable to their degree being sought at UT Arlington, take additional English courses, and/or deficiency courses as required.

DEFERRED ADMISSION

A deferred application decision may be granted when a file is incomplete or when a denied decision is not appropriate.

DENIAL OF ADMISSION

A candidate may be denied admission if they have less than satisfactory performance on a majority of the admission criteria described above.

Curriculum

Didactic Courses

15 hours of graduate coursework in the specialized area. 3 - 6 hours may be taken from an outside area if approved by the faculty supervisor and PhD committee. 15

Research

Select at least 3 hours from the following: 3

CE 6397 RESEARCH IN CIVIL ENGINEERING

CE 6697 RESEARCH IN CIVIL ENGINEERING

CE 6997 RESEARCH IN CIVIL ENGINEERING

Dissertation

Select at least 9 hours from the following: 9

CE 6399 DISSERTATION

CE 6699 DISSERTATION

CE 6999 DISSERTATION

CE 7399 DOCTORAL DEGREE COMPLETION

Total Hours

27

Program Completion

Students must maintain a minimum GPA of 3.50 or higher in their PhD Civil Engineering coursework and a 3.25 GPA outside of CE to take the comprehensive examination and to graduate.

MILESTONES

diagnostic evaluation

PhD students must take the Diagnostic Evaluation after the second semester and no later than after the third semester. The faculty supervisor and PhD committee will recommend if the student is ready to continue their doctoral program.

comprehensive exam

Students can take the Comprehensive Exam after meeting the Diagnostic Evaluation requirements and completing their didactic coursework. Until then, they will register for research courses with guidance from their faculty supervisor and PhD committee. The Comprehensive Exam is used to determine if the student has the necessary background and specialization required for the dissertation research.

dissertation defense

Upon passing the Comprehensive Exam, they will enroll in dissertation credits until they complete their research and defend their dissertation.

Advising Resources

Location:

Nedderman Hall 425

Email:

cegradadvising@uta.edu

Phone:

817-272-2201

Web:

Advisor Information & Scheduling an Appointment