

# CIVIL ENGINEERING, PH.D.

## Degree Requirements

The Ph.D. program consists of coursework, original research and thesis. A minimum of 12 credit hours of coursework (all at the 7000 level) is required beyond the Master's degree or its equivalent. The program of study must be approved by the student's advisor, the advisory committee and the Department Head.

It is the department's policy that graduate students shall take at least 6 credit hours in their core area of research within Civil Engineering with no more than 6 credit hours of graduate level courses from one professor.

**Expected Time to Graduate:** 4 years

## Progression Chart

All students must register in GRAD 8020 each term (Fall, Winter & Summer) as long as they are in the program.

Course	Title	Hours
<b>Year 1</b>		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial (must be completed first term)	0
COURSE 7XXX	Courses designated 7000 level or above <sup>1</sup>	12
GRAD 8010	Doctoral Candidacy Examination <sup>2</sup>	0
<b>Hours</b>		<b>12</b>
<b>Year 2</b>		
GRAD 8000	Doctoral Thesis <sup>3</sup>	0
<b>Hours</b>		<b>0</b>
<b>Years 3-4</b>		
GRAD 8000	Doctoral Thesis <sup>4</sup>	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> The Ph.D. program consists of coursework, original research and a thesis. A minimum of 12 credit hours of coursework (all at the 7000 level) is required beyond the Master's degree. The program of study must be approved by the student's advisor, the advisory committee and the Department Head. For students who have transferred directly from the Master's program, all the requirements of the doctoral program apply, including the completion of an additional 12 credit hours at the 7000 level. It is the Department's policy that graduate students shall take at least 6 credit hours in his/her core area of research within Civil Engineering with no more than 6 credit hours of graduate level courses from one professor.

<sup>2</sup> The examination process starts upon completion of most of the required coursework but must be completed **within the first 12 months** after the student's initial registration in the Ph.D. program. The student must complete a Ph.D. Proposed Program of Study Form and have it approved by the advisor and the department before starting the candidacy exam process.

<sup>3</sup> **No later than 16 months** after the students initial registration in the Ph.D. program, the Ph.D. candidate will be required to submit a detailed research proposal to the Ph.D. Advisory Committee. The proposal must document the research objectives, relevant background literature, required experimental, analytical or computational approaches, and projected timetable for completion of the steps necessary in the

research. The proposal is normally about 10,000 words (40 pages), not including the bibliography. The candidate will be required to make an oral presentation of the proposal (approximately 20 minutes), followed by questions directly related to the proposal. Maximum duration of the question period will be 2 hours.

<sup>4</sup> The final examination for the Ph.D. degree proceeds in two (2) stages:

- Examination of the candidate's thesis by an internal and external examiner;
- Oral examination of the candidate by all examiners on the subject of the thesis and any matters relating thereto.