Catalog of Postgraduate Programs and Curricula

Curriculum for PhD(CIVL)
(For students admitted in 2010-11)

Program Requirements for Doctor of Philosophy (PhD) Program in Civil Engineering

Credits

1. To complete **at least 30 credits** of approved coursework.

2. Students with a master's degree may be granted credit transfer of up to 15 credits, subject to approval of Department Head / PG Coordinator.

3. In general, PhD students are required to maintain a GGA of 3.150 for graduation.

Postgraduate Seminar

1. Full-time PhD students are required to take and pass CIVL 6050 *Civil Engineering Seminar I* at least 4 times.

2. All PhD students, regardless of their mode of study, are required to take and pass CIVL 6060 *Civil Engineering Seminar II* at least twice.

Language Requirements

Full-time students must pass LANG 5001 *Postgraduate English for Academic Purposes*.

(a) The 1 credit earned from LANG 5001 cannot be counted toward the credit requirements.

(b) Exemption from taking LANG 5001 may be granted by the Department Head and PG Coordinator.

Qualifying Examination

1. **Full-time** PhD students must pass the qualifying examination within 18 months of initial registration.

2. **Part-time** PhD students must pass the qualifying examination within 36 months of initial registration.

3. Prior to undertaking the qualifying examinations, each PhD student will have prepared a written thesis research proposal, and will orally present and defend it. In addition, the student will answer questions of a general civil engineering nature and questions relevant to the proposed research.

Research and PhD Thesis Examination

1. To conduct research and enroll in CIVL 7990 *Doctoral Thesis Research*; and

2. To defend the PhD thesis successfully.

Concentration

Nanotechnology Concentration

In addition to the program requirements specified above, students who opt for the Nanotechnology concentration are required to:

- Take 1 NANO course;
- Complete NANO 6010 *Advanced Topics in Nano Science and Technology* for 1 term; and
- Conduct research in nano area.

Energy Technology Concentration

In addition to the program requirements specified above, students who opt for the Energy Technology concentration are required to:

- Take 1 ENEG course;
- Complete ENEG 6010 *Advanced Topics in Energy Technology* for 1 term. *(ENEG 6010 can be used to replace 1 term of registration of CIVL 6050)*; and
- Conduct research in energy area.