



UNIVERSITY OF TORONTO
FACULTY OF APPLIED SCIENCE & ENGINEERING

Report No: 3282

To: Faculty Council

From: Professor Chris Damaren
Chair, Engineering Graduate Education and Research Committee (EGERC)

Date: February 7, 2011 for March 8, 2011 Meeting

Item: EGERC Information Report

New Courses Approved

APS520H (CHE)	Technology, Engineering and Global Development
CIV1311H	Advanced and Sustainable Drinking Water Treatment
CIV1422H	Dynamic Response of Engineering Materials
CIV1429H	Advanced Rock Engineering – Rock Engineering in Fractured Rock Masses
ECE1030H	Space Vector Theory and Control
MIE1070H	Intelligent Robots for Society
MIE1130H	Nuclear Engineering II: Thermal and Mechanical Design of Nuclear Power Reactors
MIE1212H	Convective Heat Transfer
MIE1233H	Flow and Transport Through Porous Media
MSE1031H	Forensic Engineering

PhD Admission and Program Requirements Changed

Edward S. Rogers Sr. Department of Electrical and Computer Engineering
Doctor of Philosophy
<u>Minimum Admission Requirements</u>
Admission may be granted by one of three paths: University of Toronto master's degree in Electrical and Computer Engineering with an overall B+ average, or its equivalent from a recognized university. Direct-entry is available for exceptionally qualified students with a four-year bachelor's degree or its equivalent. Transfer from the MASc to the PhD may be considered upon completion of 2.5 graduate full-course equivalents (FCE) with an overall B+ average.

The Department must be satisfied of the student's ability to do advanced research before admission may be granted.

Program Requirements

Students who enter the PhD with a master's degree will complete 2.5 graduate full-course equivalents (FCE) not previously used for other degree credit. Students may receive a course reduction of up to 1.0 FCE depending on their PhD research needs in relation to their studies at the master's level. The number of required courses will be determined by the Associate Chair, Graduate Studies, in consultation with the PhD supervisor.

Direct-entry students will complete 4.0 graduate full-course equivalents (FCE).

Students who transfer from the MASc to the PhD will complete 1.5 graduate full-course equivalents (FCE) not previously used for other degree credit. Students may also be required to complete up to 1.0 additional FCE depending on their PhD research needs in relation to their studies at the master's level. The number of required courses will be determined by the Associate Chair, Graduate Studies, in consultation with the PhD supervisor.

During the first year of PhD registration, each student must pass a qualifying oral examination in the area of research.

During the first year of PhD registration, students are required to attend the ECE Colloquium.

During the first year of registration, students are required to complete JDE 1000H Ethics in Research, if they have not already done so in a previous University of Toronto master's program.

Thesis.

Normal Program Length

4 years or 12 sessions

5 years (direct-entry PhD)

Proposed PhD Program Requirements Changes

Institute of Biomaterials & Biomedical Engineering

Doctor of Philosophy Program

The Institute proposes a change to the existing IBBME PhD program, namely, to add a clinical engineering concentration. This change entails the addition of an option in the PhD program to allow the reclassification of MHSc clinical engineering graduate students into the PhD program, an additional half-course requirement for graduate students without a clinical engineering background, a required joint engineering-health scientist supervisory arrangement and the requirement to conduct research within a clinical healthcare environment.

The proposal has been approved by the Engineering Graduate Education and Research Committee