MEMORANDUM

To: Executive Committee of Faculty Council

From: Dr. Graeme Norval
Chair, Undergraduate Curriculum Committee

Date: November 5, 2012 for November 29, 2012 Faculty Council Meeting

Re: Major Changes to the Undergraduate Curriculum for the 2013/14 Academic Year

REPORT CLASSIFICATION

This is a major policy matter that will be considered by the Executive Committee for endorsing and forwarding to Faculty Council for vote as a regular motion (requiring a simple majority of members voting to carry).

BACKGROUND

This report summarizes the major changes to the Undergraduate Program. These changes include course creation and deletion, as well as changes that impact multiple programs.

STRUCTURE

First Year Program

The Faculty will introduce 4 e-course equivalents to some of the first year courses, as part of the University’s program on expanding e-courses. The courses are APS1XXF Mechanics (for CIV100F), APS1XXS Dynamics (for MIE100S), APS1XXF Calculus I (for MAT186F) and APS1XXS Calculus II (for MAT187S). The course content will be the same as that of the existing courses. The evaluation will be based predominantly on the results of a closely supervised final exam.

Cross-Disciplinary Programs

The courses JRE410 – Marketing and Competitive Strategy and JRE420 – Organizational Behaviour and People Management are changed from F course F/S courses (offered in both first and second terms); it will also be offered in the summer. The courses will be converted from 2/0/2 to 2/2/0, to indicate that the group case studies are “laboratories” and not “tutorials”. The course enrollment will be limited to students who have completed second year.
The courses JRE300 – Foundations of Accounting and Finance will be converted from 3/0/2 to 3/0/1; the second hour of the tutorial has been found to be unnecessary. The Pre-requisite of JRE300 – Foundations of Accounting and Finance is adjusted to “Recommended Preparation”.

**Electrical and Computer Engineering**

The course ECE359 – Energy Conversion will be cancelled. Students in the Engineering Science Energy Option will be able to take the course ECE349 (Introduction to Energy Systems) which is offered in the Electrical and Computer Engineering option. Both courses cover similar material.

A new course is proposed ECE5XX – Power Electronics: Converter Topologies (3/0/1 0.5). This course fills a gap in the curriculum, and provides the students with comprehensive knowledge of main converter topologies and tools for their analysis.

**Engineering Science**

The course CSC192 – Computer Programming, Algorithms, Data Structures and Languages is to be cancelled. The majority of Engineering Science students complete the pair of courses CSC180 and CSC190, and between 40 and 70 students take the option to complete CSC192 and a free elective. The cancellation of CSC192 will mean that there is a common first year for all engineering science students.

The Course CHE391 – Organic and Biological Chemistry will add an additional hour of lab time, moving to 3/2/1; the students will have 5 labs of 4 hours each, rather than 4 labs of 3 hours each.

**PROCESS**

The Undergraduate Curriculum Committee is composed of representatives from each program; the Vice-Dean, Undergraduate Studies; the Chair, First Year; the Associate Dean, Cross-Disciplinary Programs; and the Registrar’s Office. The Committee meets regularly, and reviews changes to the curriculum.

**PROGRAM**

All programs are involved in these changes, and the impact on students in the various programs has been considered.

**RECOMMENDATION AND MOTION FOR FACULTY COUNCIL**

“THAT the Major Undergraduate Curriculum changes be approved.”