



University of Toronto

FACULTY OF APPLIED SCIENCE AND ENGINEERING

To: Faculty Council

From: Professor Will Cluett
Chair, Division of Engineering Science

Date: May 22, 2008

Item: Engineering Science – Proposed Revisions to Infrastructure Option

Recommendation:

THAT the changes to the 3rd Year of the Infrastructure Option of the Engineering Science program, as outlined in the proposal dated April 28, 2008, be approved.

Highlights:

Due to a very low enrolment in the Engineering Science Infrastructure Option for 2008-09, the Department of Civil Engineering has proposed some changes to the curriculum for the upcoming year that it has been discussing over the past several months.

The attached proposal spells out the recommended changes in detail. Overall, the key changes are (i) a stronger foundation in 3rd Year with a better balance between structures and transportation, (ii) the repositioning of the capstone design course, (iii) the grouping of electives to allow students to specialize in 4th Year, and (iv) a proposed new link with Architecture.

The following courses in the revised curriculum will be only offered to students in the Infrastructure Option:

CIV355 Urban Operations Research
CIV352 Structural Design 1
CIV359 Intelligent Transportation Systems
CIV357 Structural Design 2
CIV4XX Collaborative Design Project
ESC301 Engineering Science Option Seminar

The following three courses, previously offered only to students in the Infrastructure Option, are being removed from the curriculum:

CIV460 Engineering Project Management and Finance
CIV470 Smart Infrastructure

CIV451 Infrastructure Renewal

The Option retains AER372 and CHE374 (previously MIE374) as core courses that are offered only to Infrastructure Option students and Engineering Science students in other Options.

There are considerable other enrichment opportunities available to students in this Option through their choice of electives in 4th year, given that many of these courses are at the 500 or 1000 level.

Closing Remarks:

The Infrastructure Option has benefited from a significant investment of teaching resources for a relatively small numbers of students since inception. The Department of Civil Engineering feels that it can no longer afford to continue in this mode and therefore it has come up with a revised curriculum based on several years of experience with the Option, while reducing to some extent the resources required, making it more economically viable in the long term.

It is proposed that Faculty Council approve the planned changes for the 3rd Year of the Infrastructure Option for implementation in 2008-09.

Financial and/or Planning Implications:

There are no significant financial resources required to implement this proposal.