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## memorandum

attention

FROM
Senate
Gordon Myers, Chair
date

Senate Committee on
Undergraduate Studies
RE:
Faculty of Applied Sciences (SCUS 15-28)

For information:

Acting under delegated authority at its meeting of July 9, 2015 SCUS approved the following curriculum revision effective Fall 2015.

## 1. School of Engineering Science

(i) Description change to the Engineering Science Major program

OFFICE OF THE DEAN
8888 University Drive, Burnaby, BC TEL. 778.782.4724 www.fas.sfu.ca
from Ed Park, Associate Dean pages

RE: Curriculum Changes

The following changes have been approved by the FAS Undergraduate Curriculum Committee and are appended here for approval by SCUS and recommendation to Senate.

## 1.) School of Engineering Science

a. Calendar Change (applies to major/honours - all options)

- Concurrent BASc/MASc program

Thank you,


Edward Park
Associate Dean
(EP/mt)

# Revision to Engineering Science Major Program Calendar Text 

Faculty of Applied Sciences Curriculum Committee
Marinko Sarunic
June 2015

## Description and Rationale

The following calendar change has already passed through SGSC and Senate (effective Fall2015) but is now being submitted to SCUS as the School would also like information about the concurrent bachelor/master's program included in the undergraduate section of the calendar.

The following text will be added:

1. In the "Program Requirements" section at the end of "Engineering Science \& Design Elective Courses" for each option (major and honours) in the undergraduate program (Sample text is for Electronics Option).

Calendar Text:

## Engineering Science \& Design Elective Courses

Engineering Science and Design (ESD) Electives may be offered by departments other than the School of Engineering Science, but they must satisfy the Canadian Engineering Accreditation Board (CEAB) engineering science and engineering design requirements. Generally, Engineering Science has roots in mathematics and basic sciences, but carries knowledge further toward creative applications that could include simulation, experimental procedures, modelling and the development of mathematical or numerical techniques. Application to the identification and solution of practical engineering problems is stressed.

Engineering Design requires students to demonstrate an ability to design solutions for complex, open-ended engineering problems and to design systems, components or processes that meet specified needs with appropriate attention to health and safety risks, applicable standards, and economic, environmental, cultural and societal considerations.

Each option has a pre-approved list of electives that may include one or more preapproved ESD electives. Note that these courses may have prerequisites not required for your option; these prerequisites would still need to be taken in order to enrol in the elective. Students interested in taking an ESD elective course that does not appear on this list should contact the Chair of their option/Undergraduate Curriculum Committee and obtain his/her approval in writing before proceeding with the course.

Students in the Electronics Option must complete a minimum of 12 units from the engineering science \& design elective course list, only one of which can be at the 300 level. The remaining engineering science and design units can be fulfilled using courses as specified at http://www.sfu.ca/engineering/undergraduate_students/academic-programs/electronics/curriculum-revised.html

NOTE: SFU students enrolled concurrently in the BASc/MASc programs within the School of Engineering Science may apply a maximum of 10 graduate course units, taken while completing the bachelor's degree, towards the upper division undergraduate electives of the bachelor's program and the requirements of the master's degree. For more information, please contact the Engineering Science Graduate Program Committee Chair.

