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MEMORANDUM ───

ATTENTION	Senate	**DATE**	December 2, 2011
FROM	Bill Krane, Chair	**PAGES**	1/1
	Senate Committee on		
	Undergraduate Studies		
RE:	Faculty of Applied Sciences (SCUS 11-53)		

For information:

Acting under delegated authority at its meeting of December 1, 2011, SCUS approved
the following curriculum revision effective Fall 2012:

1. School of Engineering Science

(a) Title, description and prerequisite change for ENSC 474

Senators wishing to consult a more detailed report of curriculum revisions may do so by
going to Docushare: https://docushare.sfu.ca/dsweb/View/Collection-12682
If you are unable to access the information, please call 778-782-3168 or email
shelley_gair@sfu.ca.

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MEMO

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ATTENTION	**Bill Krane, Chair SCUS**
FROM	Rob Cameron, Associate Dean, Faculty of Applied Sciences
RE	Undergraduate Curriculum Changes
DATE	November 9, 2011

The following changes have been approved by the FAS Undergraduate Curriculum Committee and are appended here for approval by SCUS and recommendation to Senate. Please add this item to the agenda of the December 1st 2011 meeting

1. Course change – ENSC 474-4

EXISTING COURSE, CHANGES RECOMMENDED

Please check appropriate revision(s):

☐ Course number ☐ Credit ☑ Title ☑ Description ☑ Prerequisite ☐ Course deletion

Indicate number of hours for: Lecture_____ Seminar_____ Tutorial_____ Lab_____

FROM

Course Number _____ENSC 474_____

Credits (Units)_____4_____

TO

Course Number _____ENSC 474_____

Credits (Units)_____4_____

TITLE

(1) Long title for calendar and schedule, no more than 100 characters including spaces and punctuation.

Biomedical Signal and Image Processing

Digital/Medical Image Processing

(2) Short title for enrollment and transcript, no more than 30 characters including spaces and punctuation.

DESCRIPTION

Develops signal processing techniques of wide applicability, presented in the context of processing and analysis of biomedical images. Forms a sequel to the course ENSC 374-4, Introduction to Biomedical Imaging, which covers acquisition of medical images. The subsequent visualization, processing and analysis tools applied to multidimensional

PREREQUISITE
Prerequisite: ENSC 380-4 and either ENSC 327-4 or ENSC 328-1.

DESCRIPTION

Develops signal processing techniques of wide applicability, presented in the context of processing and analysis of digital images, in particular 2D and 3D biomedical images. Covers acquisition, formation and representation of digital images, filtering, enhancement and restoration in both spatial and frequency domains, image segmentation, image registration, *and discrete image transforms.*

PREREQUISITE
CMPT 128-3, CMPT 225-3 (or permission of the instructor), and ENSC- 380. Students with credit for ENSC 460/895 – Digital Image Processing and Analysis cannot take this course for further credit.

RATIONALE
ENSC 460/895 has overlap in content with ENSC 474/895. These courses need to be merged into a single course so that the requirements of the BME curriculum to provide a sequel course to ENSC 374-4 (Introduction to Biomedical Imaging) as well as that of the ENSC program for a classical digital image processing course can be satisfied.

Does this course replicate the content of a previously approved course to such an extent that students should not receive credit for both courses? If so, this should be **noted in the prerequisite**.

Effective term and year ____~~Spring 2010~~ FAll 2012____