

#### OFFICE OF THE ASSOCIATE VICE-PRESIDENT, ACADEMIC AND ASSOCIATE PROVOST

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MEMORANDUM

ATTENTION

Senate

DATE

January 11, 2010

FROM

Bill Krane, Chair Senate Committee on Undergraduate Studies PAGES

1/1

RE:

Faculty of Applied Sciences

### For information:

Acting under delegated authority at its meeting of January 7, 2010, SCUS approved the following curriculum revisions:

### 1. School of Computing Science (SCUS 10-03b)

- Changes to the lower division requirements for the GIS Major/Honors Program
- (ii) Prerequisite changes to CMPT 261, 275, 276, 300, 307, 371,426 and 470
- (iii) Deletions of CMPT 322 and 376
- (iv) Revisions to the calendar language for the Software Systems Major program

#### 2. School of Engineering Science (SCUS 10-09ii)

1. Prerequisite change to ENSC 460, 461, 462

Senators wishing to consult a more detailed report of curriculum revisions may do so on the Web at http://www.sfu.ca/senate/Senate agenda.html following the posting of the agenda. If you are unable to access the information, please call 778-782-3168 or email bgrant@sfu.ca.

### GIS HONORS - LOWER DIVISION REQUIREMENT CHANGES - MATH 151/152

FRUM:	10:
Honors Program	Ho
Lower Division Deguirements	l T a

Lower Division Requirements CMPT 120-3 Introduction to Computing Science and Programming I CMPT 125-3 Introduction to Computing Science and Programming II CMPT 150-3 Introduction to Computer Design CMPT 225-3 Data Structures and Programming CMPT 275-4 Software Engineering I GEOG 100-3 Human Geography I GEOG 111-3 Earth Systems GEOG 250-3 Cartography I GEOG 253-3 Aerial Photographic Interpretation GEOG 255-3 Geographical Information Science I MACM 101-3 Discrete Mathematics I MACM 201-3 Discrete Mathematics II MATH 151-3 Calculus I MATH 152-3 Calculus II MATH 232-3 Applied Linear Algebra and one of GEOG 213-3 Introduction to Geomorphology GEOG 214-3 Climate and the Environment GEOG 215-3 Biogeography and one of GEOG 221-3 Economic Geography GEOG 241-3 Social Geography GEOG 261-3 Introduction to Urban Geography and one of GEOG 251-3 Quantitative Geography STAT 270-3 Introduction to Probability and

onors Program **Lower Division Requirements** CMPT 120-3 Introduction to Computing Science and Programming I CMPT 125-3 Introduction to Computing Science and Programming II CMPT 150-3 Introduction to Computer Design CMPT 225-3 Data Structures and Programming CMPT 275-4 Software Engineering I GEOG 100-3 Human Geography I GEOG 111-3 Earth Systems GEOG 250-3 Cartography I GEOG 253-3 Aerial Photographic Interpretation GEOG 255-3 Geographical Information Science I MACM 101-3 Discrete Mathematics I MACM 201-3 Discrete Mathematics II MATH 151-3 Calculus I\* MATH 152-3 Calculus II\* MATH 232-3 Applied Linear Algebra and one of GEOG 213-3 Introduction to Geomorphology GEOG 214-3 Climate and the Environment GEOG 215-3 Biogeography and one of GEOG 221-3 Economic Geography

GEOG 241-3 Social Geography GEOG 261-3 Introduction to Urban Geography and one of GEOG 251-3 Quantitative Geography STAT 270-3 Introduction to Probability and **Statistics** (55 units)

\*MATH 150 may be substituted for MATH 151. MATH 154/155 or MATH 157/158 with a grade of at least B+ may be substituted with permission of the School of Computing Science.

#### Rationale:

**Statistics** 

(55 units)

(45 units)

Students in the Computing Science Major/Honors programs are permitted to substitute MATH courses as indicated in the bolded text above. Implementing this requirement for GIS students, whose academic credential is also through the School of Computing Science, ensures consistency in the academic preparation of students in CMPT courses. It also enables students transferring in from other faculties to use these substitute courses towards their GIS credential, provided their grade is sufficient.

### FROM: TO:

FRUM:	<u>TU:                                    </u>
Major Program	Major Program
Lower Division Requirements	Lower Division Requirements
Students complete all of	Students complete all of
CMPT 120-3 Introduction to Computing Science	CMPT 120-3 Introduction to Computing Science
and Programming I	and Programming I
CMPT 125-3 Introduction to Computing Science	CMPT 125-3 Introduction to Computing Science
and Programming II	and Programming II
CMPT 225-3 Data Structures and Programming	CMPT 225-3 Data Structures and Programming
GEOG 100-3 Human Geography I	GEOG 100-3 Human Geography I
GEOG 111-3 Earth Systems	GEOG 111-3 Earth Systems
GEOG 250-3 Cartography I	GEOG 250-3 Cartography I
GEOG 253-3 Aerial Photographic Interpretation	GEOG 253-3 Aerial Photographic Interpretation
GEOG 255-3 Geographical Information Science I	GEOG 255-3 Geographical Information Science I
MACM 101-3 Discrete Mathematics I	MACM 101-3 Discrete Mathematics I
MACM 201-3 Discrete Mathematics II	MACM 201-3 Discrete Mathematics II
MATH 151-3 Calculus I	MATH 151-3 Calculus I*
MATH 152-3 Calculus II	MATH 152-3 Calculus II*
MATH 232-3 Applied Linear Algebra	MATH 232-3 Applied Linear Algebra
and one of	and one of
GEOG 213-3 Introduction to Geomorphology	GEOG 213-3 Introduction to Geomorphology
GEOG 214-3 Climate and Environment	GEOG 214-3 Climate and Environment
GEOG 215-3 Biogeography	GEOG 215-3 Biogeography
GEOG 221-3 Economic Geography	GEOG 221-3 Economic Geography
GEOG 241-3 Social Geography	GEOG 241-3 Social Geography
GEOG 261-3 Introduction to Urban Geography	GEOG 261-3 Introduction to Urban Geography
and one of	and one of
GEOG 251-3 Quantitative Geography	GEOG 251-3 Quantitative Geography
STAT 270-3 Introduction to Probability and	STAT 270-3 Introduction to Probability and
Statistics	Statistics
(45 units)	(45 units)
	*MATH 150 may be substituted for MATH 151.
	MATH 150 may be substituted for MATH 151.  MATH 154/155 or MATH 157/158 with a grade
	of at least B+ may be substituted with permission
	of the School of Computing Science.
L	or the 2chool of Comburing 2change

### Rationale:

Students in the Computing Science Major/Honors programs are permitted to substitute MATH courses as indicated in the bolded text above. Implementing this requirement for GIS students, whose academic credential is also through the School of Computing Science, ensures consistency in the academic preparation of students in CMPT courses. It also enables students transferring in from other faculties to use these substitute courses towards their GIS credential, provided their grade is sufficient.



### COURSE CHANGE/DELETION

Please check appropriat	e revision(s):					
Course number	Credit	Tide	Descripti	on	Prerequisite	Course deletion
Indicate number of hou	rs for: Lecture		Seminar		Tutorial	Lab
FROM	•			то		
Course Number	CMPT 261			Course Numl	per	
Credits (Units)				Credits (Units	s)	
TITLE						
(1) Long title for calend	iar and schedule, no	more than 100 c	haracters includ	ing spaces and	punctuation.	·
(2) Short title for enroll	ment and transcript	, no more than 3	0 characters incl	uding spaces a	nd punctuation.	
DESCRIPTION				DESCRIPTI	ON	
PREREQUISITE CMPT 125, MATH 2 and 273 may not tak and IAT 261 are iden	te this course for f		271, 272,	PREREQUI CMPT 125	SITE , 126, or 128. MAT	H 232.
RATIONALE CMPT 126 and 128	fulfill the same re	quirements as (	CMPT 125. Th	ne ITEC and	IAT courses are no	longer in the catalogue.
·						
Does this course replica			ved course to suc	ch an extent t	hat students should no	ot receive credit for both courses?
Effective term and year	Sum	mer 2	2010			



### COURSE CHANGE/DELETION

Please check appropriate	e revision(s):					
Course number	Credit	Title	Descripti	ion	Prerequisite	Course deletion
Indicate number of hou	rs for: Lecture		Seminar	<del></del>	Tutorial	Lab
FROM				то		
Course Number	CMPT 275			Course Num	ber	<del></del>
Credits (Units)				Credits (Unit	s)	
TITLE				•		
(1) Long title for calend	ar and schedule, no	more than 100	characters includ	ing spaces and	i punctuation.	
(2) Short title for enroll	nent and transcript,	no more than 3	30 characters incl	uding spaces :	and punctuation.	
DESCRIPTION			٠.	DESCRIPTI	ION	
PREREQUISITE CMPT 201 or 225, N MATH 154 or 157 wi substituted for MATH	th a grade of at le		ourse.	154 or 157	i, MACM 101, MAT with at least B+ m	H 151, one W course. MATH ay substitute for MATH 151. CMPT 276 and CMPT 275.
RATIONALE CMPT 201 has not t	been offered for ov	er five years.	Students cann	not receive c	redit for both CMP	Г 275 and 276.
Does this course replica			oved course to su	ch an extent (	that students should n	not receive credit for both courses?
Effective term and year	Summ	ur 20	10			



#### COURSE CHANGE/DELETION

Please check appropris	ite revision(s):					
Course number	Credit	Title	Descrip	tion	Prerequisite	Course deletion
Indicate number of ho	ours for: Lecture		Seminar		Tutorial	Lab
FROM				TO		
Course Number	CMPT 276			Course Nun	iber	<del></del>
Credits (Units)		•		Credits (Uni	ts)	
TITLE				•		
(1) Long title for calen	dar and schedule, n	o more than 100	) characters inclu	ding spaces an	d punctuation.	
·						
(2) Short title for enro	llment and transcrip	ot, no more than	30 characters inc	cluding spaces	and punctuation.	
DESCRIPTION				DESCRIPT	ION	
						•
PREREQUISITE CMPT 225, MACM may not take this o			CMPT 275	154/157 w	urse, CMPT 225, M.	ACM 101, MATH 151. MATH substitute for MATH 151. Cannot 275 and CMPT 276.
RATIONALE					•	
Se	e CMPT	275	change	form	·	
Does this course replication of the so, this should be no		•	roved course to s	uch an extent	that students should n	ot receive credit for both courses?
Effective term and year	C	MMES	2010			



#### COURSE CHANGE/DELETION

Please check appropriate	e revision(s):					
Course number	Credit	Tide	☐ Descr	iption	Prerequisite	Course deletion
Indicate number of hou	irs for: Lecture		Seminar	- <del></del>	Tutorial	Lab
FROM Course Number	CMPT 300			T0  Course No	ımber	
Credits (Units)				_ Credits (U	nits)	
TITLE						
(1) Long title for calend	lar and schedule, no	more than 100	characters inc	luding spaces	and punctuation.	
•			•			
(2) Short title for enroll	ment and transcript	, no more than	30 characters i	ncluding space	es and punctuation.	
DESCRIPTION				DESCRIP	TION	
PREREQUISITE CMPT 201 or 225, a with credit for CMPT credit.				PREREQ CMPT 2	UISITE 25 and MACM 101.	
RATIONALE CMPT 201 and 205 not taking 300 after	have not been of 401 is nonsensica	fered for over al.	five years. C	MPT 300 is	a prerequisite for CMF	PT 401. There restriction on
Does this course replication of the so, this should be no			roved course to	such an exter	nt that students should no	ot receive credit for both courses?
Effective term and year	<b>€</b> tu	mmer	2010			



### COURSE CHANGE/DELETION

Please check appropriate	e revision(s):								
Course number	Credit	Title	Descripti	ion	Prerequisite	Course deletion			
Indicate number of hou	ers for: Lecture		Seminar		Tutorial				
FROM				то					
Course Number	CMPT 307	<u>.                                    </u>		Course Num	ber				
Credits (Units)				Credits (Units	s)				
TITLE									
(1) Long title for calend	lar and schedule, no	more than 100 c	haracters includ	ing spaces and	I punctuation.				
(2) Short title for enroll	ment and transcript,	no more than 3	0 characters incl	uding spaces a	and punctuation.				
DESCRIPTION .				DESCRIPTI	ON				
PREREQUISITE CMPT 201 or 225, N 240	AATH 201, MATH	152 and MATH	232 or	PREREQUI CMPT 225	SITE , MATH 201, MATH	H 151, and MATH 232 or 240			
RATIONALE  CMPT 201 has not been offered for over five years. Only Calculus I (MATH 151) required for this course. (This will have no change on MATH 152 enrollments, as other program requirements for MATH 152 will remain.)									
Does this course replica	ate the content of a	previously appro	ved course to su	ch an extent t	hat students should n	not receive credit for both courses?			
If so, this should be no	ted in the prer								
Effective term and year	Fall 2010				·				



#### COURSE CHANGE/DELETION

Please check appropria	ite revision(s):					
Course number	Credit	Title	Descript	ion	Prerequisite	Course deletion
Indicate number of ho	urs for: Lecture		Seminar		Tutorial	Lab
FROM				TO		
Course Number	CMPT 371			Course Num	nber	
Credits (Units)				Credits (Uni	is)	
TITLE						
(1) Long title for calen	dar and schedule, n	o more than 100	characters includ	ling spaces an	d punctuation.	
						•
(2) Short risks for some			10 ahamasan ing	, 	and minarities	
(2) Short title for enro	ument and transcrip	t, no more than 3	ou characters inc.	lucing spaces	and punctuation.	
DESCRIPTION				DESCRIPT	ION	
						·
PREREQUISITE CMPT 201 or 225, 155 or 158 with a g MATH 152.					5, CMPT/ENSC 150	and MATH 151. MATH 154 or + may be substituted for MATH
RATIONALE					•	_
11.5	se el MM	TH 151	rather	than	152 as	a pre-requisile
<b>V</b> .	7					
Does this course replication of the source replication of the second sec			oved course to su	ich an extent	that students should n	ot receive credit for both courses?
Effective term and yea	۷.,	mmer ?	2010			
	·					



### COURSE CHANGE/DELETION

Please check appropriat	e revision(s):					
Course number	Credit	Title	Descript	ion	Prerequisite	Course deletion
Indicate number of hou	rs for: Lecture		Seminar		Tutorial	Lab
FROM			٠	то		
Course Number	CMPT 426			Course Num	ber	
Credits (Units)				Credits (Unit	s)	
TITLE						
(1) Long title for calend	lar and schedule, no	more than 100	characters includ	ling spaces and	punctuation.	
(2) Short title for enroll	ment and transcript	, no more than :	30 characters incl	luding spaces a	and punctuation.	
DESCRIPTION				DESCRIPTI	ON	
PREREQUISITE Normally, students v by the end of the ter minimum CGPA of 2	m of application, (	DMPT 275, an	of 45 units d have a	by the end	students will have co of the term of appli	ompleted a minimum of 45 units cation, CMPT 275 or 276, and 0 Graded pass/fail (P/F).
RATIONALE Added CMPT 276 a	s alternate prereq	uisite.				
Does this course replication of the so, this should be <b>no</b>			oved course to su	ich an extent t	hat students should n	ot receive credit for both courses?
Effective term and year	Sum	mer 20	s (0	<u>.</u>		



### COURSE CHANGE/DELETION

Please check appropriat	e revision(s):				
Course number	Credit	Title	Description	Prerequisite	Course deletion
Indicate number of hou	ırs for: Lecture		Seminar	Tutorial	Lab
FROM			TO		
Course Number	CMPT 470	<del></del>	Cou	rse Number	
Credits (Únits)	·	<del></del> .	Cree	dits (Units)	
TITLE.		•			
(1) Long title for calend	lar and schedule, no	more than 100 o	haracters including s	paces and punctuation.	
(2) Short title for enroll	ment and transcript	, no more than 3	0 characters includin	ng spaces and punctuation.	
DESCRIPTION			DES	SCRIPTION	
PREREQUISITE CMPT 354. Student this course for further		CMPT 474 ma	PR: ay not take Cl	EREQUISITE MPT 354.	
RATIONALE CMPT 470 and 474	are complementa	ıry, not overlap	ping.		
Does this course replication of the so, this should be <b>no</b>			ved course to such a	n extent that students should n	ot receive credit for both courses?
Effective term and year	. <u>5</u> v	immer	2010		



#### COURSE CHANGE/DELETION

Please check appropria	ite revision(s):					
Course number	Credit	Title	Description	Prere	equisite	Course deletion
Indicate number of he	ours for: Lecture		Seminar	Tutorial	l	Lab
FROM			то			
Course Number	CMPT 322		Co	ourse Number		
Credits (Units)			Cn	edits (Units)	<del></del>	
TITLE						
(1) Long title for calen	idar and schedule, no	more than 100	characters including	spaces and punctua	tion.	
(2) Short title for enro	llment and transcrip	t, no more than	. 30 characters includi	ing spaces and punct	uation.	
DESCRIPTION			DE	ESCRIPTION		
PREREQUISITE			PR	LEREQUISITE		
RATIONALE This course was ac	dded incorrectly. T	The correct ver	rsion is its writing-ir	ntensive equivalen	it, CMPT 322	W, which is in the calendar.
Does this course replication of the so, this should be no			roved course to such	an extent that stude	nts should not	receive credit for both courses?
Effective term and year	sum	mer 20	10			



#### COURSE CHANGE/DELETION

Please check appropris	ate revision(s):				
Course number	Credit	Title	Description	Prerequisite	Course deletion
Indicate number of ho	ours for: Lecture		Seminar	Tutorial	Lab
FROM	•		то		
Course Number	CMPT 376		Course	Number	
Credits (Units)			Credits	(Units)	
TITLE					
(1) Long title for caler	ndar and schedule, no	more than 10	O characters including space	es and punctuation.	·
					•
		-			
(2) Short title for enm	illment and transcript	no more than	n 30 characters including sp	oaces and nunctuation	
(2) Short due for emo	minent and transcript	, no more man	. Jo characters mercanig sp	and panetaston.	
DESCRIPTION			DECCE.	INTION	
DESCRIPTION			DESCR	RIPTION	
				•	
PREREQUISITE			PRERI	EQUISITE	
RATIONALE					
This course was a	dded incorrectly. T	he correct ve	ersion is its writing-intens	sive equivalent, CMPT 3	76 W, which is in the calendar.
•					
			proved course to such an ex	stent that students should n	ot receive credit for both courses?
If so, this should be n	<del>-</del>	•	0.010		
Effective term and ye	ar	nmer	2010		

Moved that the program revisions to the Software Systems Major program be approved as follows (all revisions to p. 79 of 2009/2010 Calendar):

 Add MACM 201-3 to the "Fundamentals Requirements" section of the Software Systems Major Program description.

Rationale: MACM 201 is already an implied requirement since CMPT 307 and 379 require it. Most instructors who teach 307 do not think it wise to switch the MACM 201 requirement in 307 to MACM 101.

 Remove CMPT 322-3 from the Software Systems "Fundamentals Requirements" section.

Rationale: CMPT 322 is listed twice in this section; should keep the one listed as CMPT 322W.

Replace

and one of STAT 101-3 Introduction to Statistics STAT 270-3 Introduction to Probability and Statistics

with

STAT 270-3 Introduction to Probability and Statistics

Rationale: The more rigorous introduction provided by STAT 270 is most appropriate to this program.

## SFU

### SENATE COMMITTEE ON UNDERGRADUATE STUDIES

# SCUS 09-57 (ii) REVISED Scus 10-09; COURSE CHANGE/DELETION

Please check appropris	ate revision(s):								
Course number	Credit	Title	Descr	iption	Prerequisite	Course deletion			
Indicate number of hours for: Lecture			Seminar		Tutorial	Lab			
FROM Course Number	ENSC 460-462-4			TO _ Course N	lumberENS	ENSC 461-4			
				Credits (Units)					
TITLE									
(1) Long title for caler .	ndar and schedule, r	no more than 10	0 characters inc	luding spaces	and punctuation.				
(2) Short title for enro	ollment and transcri	pt, no more tha	n 30 characters i	ncluding spa	ces and punctuation.				
DESCRIPTION				DESCRI	PTION				
PREREQUISITE					QUISITE				
Permission of the Instructor				To be determined by the instructor subject to approval by th department chair.					
RATIONALE ENSC-UCC appro	oved that instructo proval.	ors are not allo	wed to impose	e specific re	quirements for courses	s; exceptions can only be made			
Does this course repli If so, this should be n Effective term and ve	oted in the prosper 20:	erequisite.	proved course to	such an exte	ent that students should n	not receive credit for both courses?			



### COURSE CHANGE/DELETION

Please check appropriat	e revision(s):							
Course number	mber Credit Title		Description		Prerequisite	Course deletion		
Indicate number of hou	irs for: Lecture		Seminar		Tutorial	Lab		
FROM		4		то				
Course Number	ENSC 460-46	52 <del>-4</del> 	<del></del>	Course Num	berENS	C 462-4		
Credits (Units)	<del></del>	<del></del>		Credits (Uni	3)			
TITLE								
(1) Long title for calend	dar and schedule, no	more than 100	characters inclu	ding spaces and	d punctuation.			
(2) Short title for enrollment and transcript, no more than 30 characters including spaces and punctuation.								
DESCRIPTION				DESCRIPT	ION			
PREREQUISITE				PREREQU	ISITE			
Permission of the Ir	nstructor			To be det departme		ructor subject to approval by the .		
RATIONALE	•					•		
ENSC-UCC approve by formal UCC app	red that instructors roval.	s are not allow	ed to impose s	specific requi	rements for courses	s; exceptions can only be made		
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 <b>noted in the prerequisite</b> .								
Effective term and year	spring 2010	)						



### COURSE CHANGE/DELETION

Please check appropria	te revision(s):							
Course number	☐ Credit	Title	Descrip	tion	Prerequisite	Course deletion		
Indicate number of hours for: Lecture			Seminar		Tutorial	Lab		
FROM				то				
Course Number	ENSC 460-	462-4	Course Number		erENS	ENSC 460-4		
Credits (Units)				Credits (Units	)	<del></del>		
TITLE								
(1) Long title for calen	dar and schedule, r	no more than 100	0 characters inclu	ding spaces and	punctuation.			
(2) Short title for enro	llment and transcri	pt, no more than	a 30 characters inc	cluding spaces a	and punctuation.			
DESCRIPTION				DESCRIPTI	ON			
PREREQUISITE				PREREQUI	SITE			
Permission of the	Instructor			To be dete departmen		ructor subject to approval by the		
RATIONALE								
ENSC-UCC appro by formal UCC ap	oved that instruct proval.	ors are not allo	wed to impose	specific requi	rements for course:	s; exceptions can only be made		
Does this course repli			proved course to	such an extent	that students should i	not receive credit for both courses?		
Effective term and ye	spring 20	10						