Enrolment Services
Senate and Curriculum Services
1874 – 2016 East Mall
Vancouver, BC
V6T 1Z1

16 March 2007

To: Senate
From: Senate Curriculum Committee

Re: **MARCH CURRICULUM PROPOSALS & RECOMMENDATION FOR AN AD-HOC COMMITTEE ON WRITING AND COMMUNICATION SKILLS**

The Senate Curriculum Committee has reviewed the material forwarded to it by the faculties, and encloses those proposals it deems as ready for approval.

As such, the following is recommended to Senate:

> *"That Senate approves the new and changed undergraduate courses and programs brought forward by the Faculty of Applied Science."*

Further, the Committee has considered the matter of writing and communication skills for first-year students in response to a proposal from a faculty to discontinue the enrolment of its students in English 112 and to establish a faculty-specific communications skill course to be taken in its place. The Committee is of the opinion that an ad-hoc committee should be formed to consider the matter more fully. As such, the following is recommended to Senate:

> *"That Senate direct the Nominating Committee to recommend to Senate terms of reference and composition for an ad-hoc committee to review the teaching of introductory writing and communication skills for students in all undergraduate programs; and*
>
> *That the Nominating Committee be directed to report back by the next meeting of Senate with its recommendations"*

THE UNIVERSITY OF BRITISH COLUMBIA

Enrolment Services
Senate and Curriculum Services
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Vancouver, BC
V6T 1Z1

15 March 2007

To: Senate
From: Senate Curriculum Committee

Re: **APPLIED SCIENCE CURRICULUM REPORT**

Attached please find the following proposals for your consideration:

1) The following program change:
   - **a. Bachelor of Applied Science**
     - i. **Academic Performance Evaluation**

2) The following new option in the **Bachelor of Applied Science – Electrical Engineering** program:
   - a. **Electrical Energy Systems**

3) The following revised option in the **Bachelor of Applied Science – Electrical Engineering** program:
   - a. **Biomedical Engineering**

4) The following new course:
   - a. **EECE 497** (3) Power Systems protection

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Department: APPLIED SCIENCE

Faculty Approval Date: *to be presented at Feb 15 Faculty Mtg.*

Contact Person: Bruce Dunwoody
Phone: 2-3701
Email: bruce.dunwoody@ubc.ca

APSC Undergraduate Program Change(s)

Effective Date: September 2007

Proposed Calendar Entry:

Academic Performance Evaluation
Students will be evaluated for academic progress according to the approach described under Academic Regulations.

Specifically, a student will be evaluated for academic progress once he or she has completed at least 12 credits of coursework, excluding co-op courses, since last evaluated.

One of three academic standings is assigned as a result of an academic performance evaluation; in good standing, on probation or failed. All students are in good standing when first admitted to the Faculty. The following table shows the academic standing assigned depending on current academic standing, credit-weighted average (Ave) and credits passed (CP).

		Standing Assigned		
		In Good Standing	On Probation	Failed
Current Standing	In Good Standing	Ave ≥ 55% CP ≥ 65%	otherwise	-
	On Probation (first time)	Ave ≥ 60% CP = 100%	Ave ≥ 55% CP ≥ 65%	otherwise
	On Probation (second consecutive time)	Ave ≥ 60% CP = 100%	-	otherwise

A student assigned an academic standing of failed will be required to discontinue his or her studies for one year prior to an appeal for readmission. (Note that a student required to discontinue his or her studies will be allowed to complete any courses already begun at the time of the requirement to discontinue his or her studies.)

A student who is assigned an academic standing of failed after having previously being required to discontinue his or her studies will be required to withdraw from the University and will not normally be readmitted.

Promotion
A student will be promoted from one year-level to the next if he or she has successfully completed at least 80% of the credits for the year level in which the student is currently registered.

URL:
http://www.students.ubc.ca/calendar/index.cfm?tree=12,195,272,29

Present Calendar Entry:

~~Advancement~~
~~In order to pass the year, a student must both obtain an overall average of at least 55% in the Winter Session and pass in 65% of credits taken. A student who fails a year will be required to discontinue studies in the Faculty for at least one year but is eligible to apply for readmission after that year. A student who fails a second time will be required to withdraw. In a failed year a student will be granted credit for all courses passed.~~

~~A student who withdraws during Term 2 of Winter Session after obtaining less than 55% on the December examinations will not be readmitted for the following Winter Session but is eligible to apply for readmission after that year.~~

~~In order to advance in the Faculty of Applied Science, students normally must have met the Language Proficiency Index (LPI) requirement by April 30 to be eligible for admission to a program at the second-year level. (See *Language Proficiency Index Requirement for First-Year English*.) They must also complete ENGL 112 (or equivalent) prior to promotion to third year, and APSC 201 prior to promotion to fourth year.~~

~~Term essays and examination papers may be refused a passing mark if they are noticeably deficient in English.~~

Type of Action: Modify description of regulations.

Rationale: The general University regulations changed from sessional evaluations to term-based evaluations. This change to the Faculty-specific is complementary to that change.

The single Advancement heading has been changed to three separate headings for clarity.

Category 1
Document ID#: n/a

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Communication Requirement **The Faculty of Applied Science recognizes that good communication skills in English are essential to the understanding of course material and to the successful practice of engineering. Term essays and examination papers may be refused a passing mark if they are poorly written** **Students must obtain a Language Proficiency Index (LPI) score of 5, unless exempt, prior to taking a first-year English course. Exemptions from the LPI requirement are listed in the Faculty of Arts section of the Calendar under The LPI Examination.** **Students must have the LPI requirement before being permitted to continue with the second year of their programs.** **Students must pass ENGL 112 or its equivalent before being permitted to continue with the third year of their programs.** **Students must pass APSC 201 before being permitted to continue with the fourth year of their programs.** **Any student who does not meet one of these timing requirements will be permitted to take up to 12 credits in the first term after the requirement is not met, but will not be allowed to take any courses, other than ENGL 112 or APSC 201 as appropriate, after that time.**	
Department: ELECTRICAL AND COMPUTER ENGINEERING Faculty Approval Date: *to be presented at Feb 15 Faculty Mtg.*	Contact Person: Dr. Andre Ivanov Phone: 2-6936 Email: ivanov@ece.ubc.ca
EECE Undergraduate New Option	
Effective Date: September 2007 Proposed Calendar Entry: *(The placement of this option will follow the Biomedical Engineering Option and precede the Nanotechnology and Microsystems Option in the calendar.)* … **Electrical Energy Systems Option** **The Electrical Energy Systems Option in Electrical Engineering will provide students with theoretical and practical experience in the electric energy related fields. Students will be admitted at the third year level. Those who satisfactorily complete the following program will be given recognition as receiving the Bachelor of Applied Science in Electrical Engineering (Electrical Energy Systems Option).** **TRADITIONAL THIRD YEAR** **STAT 251 3**	URL: n/a Present Calendar Entry: n/a Action: New Option. Rationale: To provide students with a solid foundation in Electrical Engineering as well as specific training in subjects that are becoming increasingly important as the world's energy production and consumption is facing revolutionary changes affecting all technologies and requiring higher efficiency for achieving sustainable industrialized future, and to set the stage for dealing with ever-increasing complexity of the energy-handling and energy-dependent systems and/of infrastructures. Particular challenge areas include: • Harvesting energy from renewable and sustainable resources • Integrating alternative energy sources • Operation of modern electric grid closer to its physical capacity

EECE 314 3 **EECE 352** 3 **EECE 353** 3 **EECE 356** 4 **EECE 359** 3 **EECE 360** 3 **EECE 361** 2 **EECE 364** 4 **EECE 373**[1] 4 **Complementary Studies Electives**[1] 6 **Total Credits** 38 **[1] See Complementary Studies Courses, p. 97.** Effective Date: **September 2008** **Fourth Year** **APSC 450** 2 **EECE 450** 3 **EECE 474** 6 **EECE 496**[3] 5 **EECE 458** 3 **EECE 492** 3 **EECE 493** 3 **Technical Electives**[4] 15 **Total Credits** 40 **[3] The project will have electric energy systems focus with preferable involvement from industry.** **[4] To be chosen from the list of fourth year electives available from the Department, nine credits of which must be chosen from the courses with energy systems focus.** …	• Advanced protection and control schemes for preventing large-system-blackouts • Increasing resiliency of electrical energy infrastructures • Achieving higher efficiency of energy conversion and storage at all levels and applications The option will provide students with theoretical and practical experience in the electric energy related fields. It will also continue to establish British Columbia as a centre of engineering expertise and advanced technological solutions for sustainable and environment-friendly future. Examples of suggested electives for Fourth Year: EECE 459: Computer Applications in Power Systems EECE 497: Power Systems Protection EECE 495: Industrial Drives MECH 470: Energy Conversion Systems CIVL 415: Water Resource Engineering Category 1 Document ID#: EECE UG001
Effective Date: **September 2008.** Proposed Calendar Entry: Biomedical Engineering Option: … **Fourth Year** **APSC 450** 2 **EECE 432** 3 **EECE 433** 3 **EECE 434** 3 **EECE 450** 3 **EECE 474** 6 **EECE 496** 5 **Complementary Studies Electives**[1] 3 **Technical Electives**[2] 12 **Total Credits** 40 **[1] See Complementary Studies Courses, p. 97.** **[2] To be chosen from a list of electives available from the Department.**	URL: http://www.students.ubc.ca/calendar/index.cfm?tree=12,195,272,39 Present Calendar Entry: Biomedical Engineering Option: … Type of Action: Revise calendar statement to include fourth year of program. Rationale: Addition of Fourth Year course requirements, following on from Third Year offered for the first time in 07W. This is the same version of 4th year listed in the original supporting documents. Category 1 Document ID#: n/a as this option was approved in its entirety in Spring 2006.
EECE Undergraduate New Course(s)	
Effective Date: September 2007 Present Calendar Entry:	URL: n/a Present Calendar Entry: n/a

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EECE 497 (3) POWER SYSTEMS PROTECTION. Analysis of disturbances, security of power systems, cascading and blackouts; role and impact of protection; transducers and measuring elements; protection of transmission and distribution systems; protection of generators, substation equipment, special protection systems and relays. [3-0-0] *Prerequisite:* EECE 458, and one of EECE 373, EECE 374.	Action: New course. Rationale: This course has been offered two times in the past as EECE 491X. As the subject of power systems protection is important for the Electrical Energy Systems option, this course will be given a permanent number and will be offered once per academic year. Category 1 Document ID#: EECE UG002