# SIMON FRASER UNIVERSITY

# OFFICE OF THE VICE-PRESIDENT, ACADEMIC

## **MEMORANDUM**

10:	Senate
From:	D. Gagan, Chair Am My Senate Committee on Academic Planning
Subject:	Faculty of Applied Sciences - Curriculum revisions
Date:	December 9, 1996

Action undertaken by the Senate Graduate Studies Committee and the Senate Committee on Academic Planning gives rise to the following motion:

### Motion:

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"that Senate approve and recommend approval to the Board of Governors the curriculum revisions for the Faculty of Applied Sciences as set forth in S.97 - 7 as follows:

S.97 - 7 a) School of Computing Science -Non-thesis option for the M.Sc. in Computing Science

### For Information:

Acting under delegated authority of Senate, SGSC approved revisions as set forth in

S.97 - 7b) School of Engineering Science

In all cases agreement has been reached between the Faculty and the Library in the assessment of library costs associated with new courses.

Any Senator wishing to consult the full report of curriculum revisions within the Faculty of Applied Sciences should contact Bobbie Grant, Senate Assistant, at 291-3168 or e-mail bgrant@sfu.ca

SGSC Reference: Meeting Nov. 18/96 SCAP Reference: SCAP 96 - 58

## FOR APPROVAL

- a)
- School of Computing Science i) Non-thesis option for the M.Sc. in Computing Science

# Simon Fraser University MEMORANDUM

To: Alison Watt Registrar's Office

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From: Tiko Kameda & Kame Director of Graduate Program School of Computing Science

CC: Marian McGinn Subject: Calendar Changes

Date: Nov. 26, 1996

Dear Alison,

Our proposal for **project option** in Computing Science M.Sc. program has been approved by SGSC. At the advice of Phyllis Wrenn, Associate Dean of Graduate Studies, I have cleaned up the wording of the proposed Calendar description without changing its substance. So, please present this version to the Senate for its approval.

# Rules for Project Option in M.Sc. program:

- 1. Course requirements: At least 27 semester-hours or graduate-level courses (typically 9 courses) plus a 5 credit-hour project. The project option has the same minimum GPA requirement as the thesis option.
- 2. Length of the program: The same regulations on the maximum length of time to finish the M.Sc. degree apply to a project student as to a thesis student.
- 3. Option Selection: An M.Sc. student must choose between thesis and project options by the end of the second semester. Any switch thereafter must be approved by the Graduate Program Committee.
- 4. Degree: Thesis and project students will receive the same degree, i.e., M.Sc. in Computing Science.

# Rationale for Introduction of Project Option:

- 1. To enhance the productivity of our graduate program by providing diversity and flexibility. Not all M.Sc. students are interested in a research-oriented career.
- 2. To provide better choices of courses and flexible programs for our graduate students, by making more courses with reasonably-sized classes regularly available. This will make the length of a student's M.Sc. program more predictable.
- 3. Expected sources of project students:
  - (a) Applicants holding an M.Sc. or Ph.D. in another field, e.g., mathematics, physics, engineering, etc. They have already demonstrated their academic ability. For the purpose of entering a new job market, they wish to acquire CS background within a predictable length of time. Recently, we have had a large number of such applicants.
  - (b) Students who originally intended to write a thesis, but for various reasons, now wish to obtain a graduate CS degree and find a job as soon as possible.

If approved, the introduction of the project option will necessitate the following changes in the Calendar:

### Current Description of the Computing Science M.Sc. Program:

Students in the MSc program are expected to acquire breadth of knowledge through a sequence of courses and depth of knowledge through completion and defense of a thesis based on independent work. Under normal circumstances an MSc degree should be completed within 6 semesters and should not require longer than 8 semesters.

### **Breadth Requirement**

MSc students must take at least 15 semester hours of graduate level course credit (typically five courses) such that at least one course is chosen from each of areas I, II and III of Table 1. At least 12 of the 15 semester hours (typically 4 courses) must be taken in Computing Science. Coursework will normally be completed by the end of the student's fifth semester in the program.

#### **Depth Requirement**

MSc students must submit and defend a thesis based on their independent work. The student, in consultation with her/his supervisory committee, will formulate and submit for their approval a written thesis proposal, normally not later than the end of the third semester in the program.

Regulations specifying the composition of the examining committee and the procedures for the final public defense of the thesis can be found in sections 1.9 and 1.10 of the Graduate General Regulations. MSc students are required to give a seminar. Typically this will be on their thesis research and will be presented in the interval between distribution of the thesis to the committee and the defense.

### Proposed New Description of the Computing Science M.Sc. Program:

Students in the MSc program are expected to acquire breadth of knowledge through a sequence of courses and depth of knowledge through completion and defense of a thesis or a project. Under normal circumstances an MSc degree should be completed within 6 semesters and should not require longer than 8 semesters. An M.Sc. student must choose between thesis and project options by the end of the second semester. Any change in option thereafter must be approved by the Graduate Program Committee.

### **Breadth Requirement**

MSc students with thesis option must take at least 15 semester hours of graduate-level course credit (typically 5 courses) such that at least one course is chosen from each of areas I, II and III of Table 1. At least 12 of the 15 semester hours (typically 4 courses) must be taken in Computing Science. Coursework will normally be completed by the end of the student's fifth semester in the program. MSc students with project option must take at least 27 semester hours of graduate-level course credit (typically 9 courses) such that at least two courses are chosen from each of areas I, II and III of Table 1. The two courses taken in each area should be from different sub-areas. At least 21 of the 27 semester hours (typically 7 courses) must be taken in Computing Science.

The project should be roughly equivalent to 5 credit-hours of work.

### Depth Requirement

MSc students must submit and defend a thesis or project based on their independent work. For the thesis option, the student, in consultation with her/his supervisory committee, will formulate and submit for their approval a written thesis proposal, normally not later than the end of the third semester in the program.

Regulations specifying the composition of the examining committee and the procedures for the final examination of the thesis or project can be found in Sections 1.9 and 1.10 of the Graduate General Regulations. MSc students with thesis option are required to give a seminar. Typically this will be on their thesis research and will be presented in the interval between distribution of the thesis to the committee and the defense.

SGSC Reference: Meeting November 18, 1996 SCAP Reference: SCAP 96 - 59

## FOR INFORMATION:

i) <u>School of Engineering Science</u>

Acting under delegated authority of Senate, SGSC approved the following:

New courses:	
ENSC 855 - 3	Modern Semiconductor Devices
ENSC 856 - 3	Compound Semiconductor Device Technology.