

SIMON FRASER UNIVERSITY

S.82-45

MEMORANDUM

To Senate

From Office of the Dean of Graduate Studies

Subject Graduate Courses, CMPT 601-5, 602-5

Date February 2, 1982

MOTION: That Senate approve and recommend approval to the Board, as set forth in S.82-45 - New Graduate Courses, CMPT 601-5 and 602-5.

These courses were approved by the Executive Committee, Senate Graduate Studies Committee at its meeting on January 18, 1982.

Bryan P. Beirne  
Dean of Graduate Studies.

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CALENDAR INFORMATION:Department: Computing Science Course Number: 601Title: Computing Science Education IDescription: please see attachedCredit Hours: 5 Vector: 2-2-2 Prerequisite(s) if any: see attachedENROLLMENT AND SCHEDULING:Estimated Enrollment: \_\_\_\_\_ When will the course first be offered: Fall 1983How often will the course be offered: bi-annuallyJUSTIFICATION:

This course is necessary for the M.Ed. with emphasis in Computer Education, a recently introduced specialization in the M.Ed. program.

RESOURCES:Which Faculty member will normally teach the course: Most members of the Computing Science DeptWhat are the budgetary implications of mounting the course: 1/8 faculty, 1/2 lab instructor,3 Apple micro-computers, 4 disk drives, 1 tablet, 1 plotter, 1 printer(see attached for fall-back position)Are there sufficient Library resources (append details): YES

- Appended:
- a) Outline of the Course
  - b) An indication of the competence of the Faculty member to give the course.
  - c) Library resources

Approved: Departmental Graduate Studies Committee: \_\_\_\_\_ Date: 7/12/81Faculty Graduate Studies Committee: P.J. Brantingham Date: 7/12/81Faculty: P.J. Brantingham Date: 7/12/81Senate Graduate Studies Committee: Andrew Beer Date: Jan 19/82

Senate: \_\_\_\_\_ Date: \_\_\_\_\_

**DESCRIPTION:** This course will introduce graduate students in Education to the basics of computing science. Emphasis will be placed on the use of micro-computers. Topics will be programming micro-computers; file handling; micro-computer hardware; word processing; graphics; social, economic and legal implications.

**PREREQUISITES:** Graduate status in Education. If the student has an adequate background in computing, this course must be replaced by other Computing Science undergraduate or graduate courses.

CMPT 601-5

Course Outline

Title: Computing Science Education I

This course will introduce graduate students in Education to the basics of computing science. Emphasis will be placed on the use of micro-computers.

Topics: Introduction  
Programming micro-computers  
The programming language PASCAL  
File handling  
Micro-computer hardware  
Word-processing  
Graphics  
Social, economic and legal implications

Recommended Reading:

APPLE Reference Manual  
Boulding, K., Problem Solving using Pascal, 1977  
Papert, S., Mindstorms, 1979  
Zaks, R., Microprocessors: From Chips to Systems, 1977  
Artwick, B., Microcomputer Interfacing, 1980

New Graduate Course Proposal FormCALENDAR INFORMATION:

Department: Computing Science Course Number: 602  
 Title: Computing Science Education II  
 Description: please see attached  
 Credit Hours: 5 Vector: 3-3 Prerequisite(s) if any: see attached

ENROLLMENT AND SCHEDULING:

Estimated Enrollment: \_\_\_\_\_ When will the course first be offered: Fall 1982  
 How often will the course be offered: bi-annually

JUSTIFICATION:

This course is necessary for the M.Ed. with emphasis in Computer Education, a recently introduced specialization in the M.Ed. program.

RESOURCES:

Which Faculty member will normally teach the course: Most members of the Computing Science Dept.  
 What are the budgetary implications of mounting the course: 1/5 faculty, 1/2 teaching assistant

(see attached for fall-back position)

Are there sufficient Library resources (append details): yes

Appended: a) Outline of the Course  
 b) An indication of the competence of the Faculty member to give the course.  
 c) Library resources

Approved: Departmental Graduate Studies Committee: \_\_\_\_\_ Date: 7/12/81

Faculty Graduate Studies Committee: P.J. Brautenghi Date: 7/12/81

Faculty: P.J. Brautenghi Date: 7/12/81

Senate Graduate Studies Committee: Clayton Green Date: Jan 19/82

Senate: \_\_\_\_\_ Date: \_\_\_\_\_

DESCRIPTION: This course introduces some formal topics in Computing Science to the graduate student in Education. Topics include discrete mathematical structures; models of computing; data structures; formal languages and algorithms. Also, methods will be introduced for the design and implementation of large programs using structured modular design.

PREREQUISITES: CMPT 601-5 or ~~consensus~~<sup>consent</sup> of instructor(s).

For CMPT 601-5 and 602-5

Competence of the Faculty member to give this course:

The courses are, in their content, on the level of undergraduate courses in Computing Science. Therefore many faculty members and sessional lecturers in the Department are qualified to teach these courses.

Library resources:

The courses require the same library resources as undergraduate courses in Computing Science. Since the size of the courses is relatively small compared to the undergraduate courses, additional library resources are not necessary.

In case the proposed Budgetary and Space Requirements cannot be fulfilled by the University, the Graduate Studies Committees of the Computing Science Department and the Education Faculty have agreed to the following points:

1. The Faculty of Education will make available funds for a Sessional Lecturer (overload faculty member) to be appointed in cooperation with the Department of Computing Science to staff the courses, whenever offered.
2. The Faculty of Education will make available the necessary equipment and lab facilities.
3. The Faculty of Education will make available lab instructor's time as needed.

It should be pointed out that in the eyes of both Committees, this fall-back position is only second to the supply of the proposed budgetary and space requirements. But in view that the Faculty of Education needs these courses for its new M.Ed. program with computer emphasis and the Department of Computing Science is incapable of delivering the courses with its present resources, we present this compromise.





# SIMON FRASER UNIVERSITY

## MEMORANDUM

To..... Dr. B. P. Beirne.....	From..... H. M. Evans.....
..... Dean of Graduate Studies.....	..... Registrar.....
..... New Course Proposals.....	
Subject..... CMPT 601-5, 602-5.....	Date..... April 9, 1982.....

The Senate Committee on Agenda and Rules decided to refer back to the Senate Graduate Studies Committee the new course proposals CMPT 601-5 and 602-5.

The Committee considered that it would be inappropriate to submit these items to Senate until the following issues had been addressed:-

- status of the "recently introduced specialization in the M.Ed. program" (i.e. Computer Education)
- requirement for 1/2 lab instructor for a course scheduled only every other year
- sequence of initial offering does not permit prerequisite for CMPT 602 to be fulfilled before first offering
- level of course in relation to lower level undergraduate CMPT courses
- the prerequisite for CMPT 602 should presumably refer to consent of instructor(s) rather than "consensus" of same

The first of the above items is the primary concern.

cc. J. Tuinman, Education  
M. McGinn, Asst. Registrar  
Graduate Studies

P.S. Further to our telephone call, discussion has been held with Dr. Tuinman who will respond and submit it through you to me.