To....SENATE...

From SENATE COMMITTEE ON ACADEMIC PLANNING/
SENATE COMMITTEE ON UNDERGRADUATE
STUDIES

Subject.COMPUTING.SCIENCE.........................

Date OCTOBER 1, 1981............................

1. Proposed Enrolment Limitations
2. Proposed New Course - CMPT 101-4;
CMPT 103-4 - Change of Title and
Prerequisite

MOTION 1   That Senate approve and recommend approval to the Board of Governors, as set forth in S.81-127, the proposed enrolment limitations for Computing Science, including the following:

i) Prior to the publication of the pre-registration booklet for each Fall semester the Computing Science Department will establish the minimum CGPA level required for acceptance into its major, minor, honors, or other programs or into the Department's upper division courses for the academic year - Fall, Spring, Summer. This criterion will be that CGPA between 2.25 and 2.6 which is predicted to result in a total of between 150 to 225 new students accepted into the Department's programs. (Students having a CGPA of 2.6 or higher will be accepted into the Department's programs regardless of the total number of applications; students below 2.25 will not be accepted under any circumstances.)

*   To remain in a program in Computing Science, a student will be expected to maintain at least the minimum level of CGPA which was required for his/her initial acceptance into the program.

Students who wish to take courses in the Department but who are not in designated programs will be governed by the CGPA in effect at the time of their course registration.

Regulations - Restrictions on Entry to and Continuation in Minor, Major and Honors Programs and to Upper Division Courses in Computing Science or to Related Joint Programs or Courses.
(These regulations are in addition to the general University regulations covering such matters as admission to the University, acceptance into or continuation in minor, major, honors programs, requirements for graduation.)

1. A student desiring to take a minor, or a major, or an honors program in Computing Science, or a combined major or honors program in Computing Science may continue to indicate on registration forms the INTENDED program as under current regulations and practice.

2. For formal declaration and formal acceptance into any one of these programs involving Computing Science, a student must be registered for a semester in which the 61st or higher credit hour is to be taken and normally will be expected to have completed or be registered in a semester completing the 57th credit hour. Other cases will be reviewed and determined by the Department.

3. To be formally accepted into a minor or major program the student
   will be required to have a CGPA of 2.25 or higher at the time of
   acceptance. The usual higher average for honors entry will con-
   tinue to be applied.

4. To remain in a minor or major program the student will be required
   to maintain a CGPA of 2.25 or higher. The usual higher average
   required to continue in an honors program will continue to be
   applied.

5. Entry to and registration in any upper division Computing Science
   course requires
   a) That the student be or have been formally accepted into one of
      these minor or major or honors programs involving Computing
      Science and be eligible to continue in the program, or
   b) That the student have completed or be registered in a semester
      completing the 57th or higher credit hour and have a CGPA of
      2.25 or higher. Other cases may be reviewed and determined
      by the Department.

   For entry and registration in subsequent Computing Science upper
   division courses the student will be required to maintain a CGPA
   of 2.25 or higher.

6. If during a semester (for example during pre-registration), Depart-
   mental assessment is made on the basis of student record then
   available and decision is to formally accept the student into one
   of these programs, or to permit the student to register for one or
   more upper division courses in Computing Science, that decision shall
   stand for the immediately approaching (or just commenced) semester.
   It will not be cancelled because of results known at the end of term,
   other than for failure to complete prerequisites, or action under
   general University regulations resulting in Required to Withdraw or
   Permanent Withdrawal status, or other General regulations. It will
   not automatically stand for later semesters; updated data would apply.

   If the academic record at the time of review was too low for a student
   to be authorized for acceptance to a program or to take upper division
   courses but the end of term record for the semester just completed is
   adequate, the student then may seek adjustment through the Department
   and following general regulations either
   a) proceed through In-person registration if not already registered,
      or
   b) proceed through adjustment through the Course-Change period, if
      already registered.

7. For students entering Simon Fraser University on the basis of work
   elsewhere the CGPA will be taken to be that determined under admissions
   regulations, normally on courses which can be considered for transfer.
   After transfer the CGPA is based on Simon Fraser University courses.
   Exceptional cases may be considered by the Department.

8. Where the average of a student accepted into a program drops below
   that required the earlier formal acceptance is no longer valid unless
   reviewed by the Department and waiver granted for continuance.

9. Prerequisites for any course may be waived for individual students
   by the Department. In order for a course to be accepted as fulfilling
   a prerequisite a student must have a grade of C or higher.

10. No student will be permitted to register for more than three upper division Computing Science courses unless specifically permitted to do so by the Department. No student with a CGPA < 2.6 will be permitted to register for more than two upper division Computing Science courses unless specifically permitted to do so by the Department.

11. The effective date for commencement of these regulations will be to affect registration for and after the Spring semester, 1982. They will apply generally to all students for then and thereafter granted or being granted formal acceptance into these programs or, if not in a Computing Science program, to students desiring to undertake one or more upper division courses in Computing Science (unless waiver is granted by the Department).

As it is not desired to impose hardship on students who already are well advanced in their Computing Science programs, the following provisions will apply to such students whose records would indicate as of 1 January 1982, that they would require not more than sixty credit hours to complete the degree:

a) A student who lacks thirty or fewer credit hours needed to complete degree requirements will have one year to complete without impact from these new regulations - (to December 1982).

b) The Department may consider further these or other exceptional cases to lessen hardship.

ii) (This item is proposed regulation 9. of Motion 1 i) but is to be considered separately.)

That in order for a course to be accepted as fulfilling a prerequisite, a student must have a grade of C or higher.

iii) That any student dropping a Computing Science course will be given the warning "Student advised of low future enrolment priority for this course." The student will not be allowed to pre-register for that course in any of the next two semesters and will be admitted to that course only if space exists during the ADD/DROP period in each of the next two terms.

MOTION 2   That Senate approve and recommend approval to the Board of Governors, as set forth in S.81-127:

a) The proposed new course CMPT 101-4 - Introduction to a Programming Language for Computing Science Majors/Minors/Honors; and

b) A change in title and in prerequisite for CMPT 103-4 - Introduction to a Programming Language - for Non-Computing Science Majors/Minors/Honors.

BACKGROUND INFORMATION:

1. The proposal to adopt regulations limiting enrolments in upper division courses and programs in Computing Science has been reviewed by SCAP and SCUS and is now recommended to Senate as in the above motion.

Basically the proposal would adopt regulations generally similar to those approved a year ago by Senate for Business Administration and also provide a varying mechanism similar to that now being requested by Business Administration.

There are some differences, notably in the proposed effective date (Item 11

of the motion), Item 10 pertaining to additional restrictions on registration in upper division Computing Science courses, and Motion 1 iii).

* 2. The third paragraph of the above motion was discussed by both bodies but final wording was not then established. A rewording will be provided at Senate.

3. There was concurrence at the Committee that the "Note ..." at the end of the motion on the original paper is not part of the present submission. It, with related matters, will receive early attention at SCAP and/or SCUS as appropriate.

4. As presently worded the regulations, if approved, would be effective for the Spring semester 82-1 with the minimum required CGPA of 2.25 but with intent that this could be varied effective for and after Fall 82-3.

It is understood that the Faculty/Department may bring forward up-dated information at the Senate meeting with intent to permit varying of the 2.25 average to affect entries for and after Spring 82-1.

5. At the Committee meetings some members indicated preference for a fixed quota system, others supported the present recommendations with decision of those bodies as indicated in the motion above.

6. There was indication of some concern that the procedures could lead to grade inflation but there was conclusion that this could be reasonably controlled.

Some additional information on statistics will be available at the meeting of Senate.

7. It was noted that Business Administration already has had approved through normal curriculum channels the requirement that to be accepted as fulfilling a prerequisite a student must have a grade of C or higher. That same provision is being requested now by Computing Science.

8. There was intensive discussion, both at SCAP and SCUS, on Item 10 and on Motion 1 iii), with evidence of concern on the procedures and policies but without determination of a suitable alternative proposal. The items therefore come forward as accepted by those bodies.

9. At both Committees concern was expressed that there was not clear indication that students could appeal decisions, notably affecting Motion 1 iii) above, and assurance was given that provision would be made and included in the paper.

A proposed wording to indicate the provision for appeals in the Computing Science paper will be provided at Senate.

SIMON FRASER UNIVERSITY

MEMORANDUM

To.... Mr. H.M. Evans, Secretary to Senate Committee on Undergraduate Studies.

From.. T.W. Calvert, Dean, Faculty of Interdisciplinary Studies.

Subject.. COMPUTING SCIENCE

Date.. September 23, 1981

1. PROPOSED ENROLMENT LIMITATIONS

2. PROPOSED NEW COURSE - CMPT. 101-4 and
   CHANGE TITLE AND PREREQUISITE - CMPT. 103-4

You have received four motions for the SCUS agenda; these have been approved by the Computing Science Department and by the Faculty of Interdisciplinary Studies Undergraduate Curriculum Committee. A number of comments are in order.

1. I share the concern of the Department and the Faculty Undergraduate Curriculum Committee that immediate steps must be taken to equitably control enrollment in the department.

2. It is important that the proposal to control admission to the honors/major/minor and to upper division courses be implemented effective January 1, 1982. Provision has been made to protect students who have already declared their major but these safeguards limit the effectiveness of the regulations during the first two years.

3. A new course, CMPT 101-4 is proposed. This course will be essentially identical to CMPT 103-4 but will have rather higher standards and will be required of those going on to degree programs in Computing Science. The existing CMPT 103-4 will continue to be the course for those who do not intend to continue. Since the new CMPT 101 is essentially identical to the existing CMPT 103, we hope that SCUS will waive the requirement that the new course be considered for overlap by other faculties.

Please let me know if any additional clarification is required.

TWC/pgm

c.c. N.J. Cercone
     N.M.G. Bhakthan

SIMON FRASER UNIVERSITY

MEMORANDUM

To...... Mr. H.M. Evans, Registrar and Secretary to the Senate Committee on Undergraduate Studies.

From.... Janet Blanchet, Secretary to Faculty of Interdisciplinary Studies Undergraduate Curriculum Committee.

Subject.....................................

Date...... September 23, 1981

Re: Measures To Control Enrolment In
      The Department of Computing Science
      (I.S.C. 81-18)

At a meeting of the Faculty of Interdisciplinary Studies Undergraduate Curriculum Committee held on Tuesday, September 22, 1981, the motions outlined in the attached memorandum were given approval.

Would you please place these items on the next agenda of the Senate Committee on Undergraduate Studies for consideration.

ATTACHMENT

JB/pgm

SIMON FRASER UNIVERSITY
MEMORANDUM

TO: Professor T. Calvert, Dean
    Faculty of Interdisciplinary Studies

FROM: Nick Cercone,
    Computing Science

SUBJECT: Control of Enrolment-1981

DATE: 23 September 1981

At a meeting of the Computing Science Program Council held yesterday the following emergency measures were ratified to set reasonable enrolment limits and enable the Department to control the enrolment numbers of its undergraduate students. The student's rights and expectations were carefully considered and the motions, which were all unanimously approved by this Department, reflect the best compromise between individual expectations and responsible Departmental management.

The four motions include:

(1) Controlled entry to major and the handling of upper division course registrations (this motion is attachment #1).

(2) Any student dropping a Computing Science course will be given the warning "Student advised of low future enrolment priority for this course". The student will not be allowed to pre-register for that course in any of the next two semesters and will be admitted to that course only if space exists (during the ADD/DROP period in each of the next two terms).

(3) Segment CMPT 103 into two courses: CMPT 101 for majors and honours only and CMPT 103 for non-majors.

(4) Raise the minimum grade required for a prerequisite course from C- to C.

Rationale for these measures is outlined in attachment #2 in the form of a memeo to Computing Science faculty. Attachment #2 also details some alternative avenues of investigation which will keep the Faculty curriculum committee alerted to potential Computing Science changes over the next several semesters.

MOTION

Prior to the publication of the pre-registration booklet for each semester the Computing Science Department will establish the minimum CGPA level required for acceptance into its major, minor, honours, or other programs or into the Department's upper division courses. This criterion will be that CGPA between 2.25 and 2.6 is predicted to result in a total of between 150 to 225 new students accepted into the Department's programs. (Students having a CGPA of 2.6 or higher will be accepted into the Department's programs regardless of the total number of applications; students below 2.25 will not be accepted under any circumstances).

To remain in a program in Computing Science, a student will be expected to maintain at least the minimum level of CGPA which was required for his/her initial acceptance into the program.

Students who wish to take courses in the Department but who are not in designated programs will be governed by the CGPA in effect at the time of their course reqistration.

NOTE: It is proposed that new students in Extended Studies programs and Special Students will be given a lower registration priority than regular students, and will be held to the same entry requirements as regular students in the program.

EXEMPTIONS

Exemptions to the rules and regulations explained in this document may be given as follows:

(1) exemption good for 1 year for anyone within 30 credits of graduation; and

(2) exemption good for 2 years for anyone within 60 credits of graduation.

REGULATIONS - Restrictions on Entry to and Continuation in Minor, Major and
Honours Programs and to Upper Division Courses in Computing
Science or to Related Joint Programs or Courses.

(These regulations are in addition to the general University regulations covering
such matters as admission to the University, acceptance into or continuation in
minor, major, honours programs, requirements for graduation.)

1. A student desiring to take a minor, or a major, or an honours program in Computing
Science, or a combined major or honours program in Computing Science may continue
to indicate on registration forms the INTENDED program as under current
regulations and practise.

2. For formal declaration and formal acceptance into any one of these programs
involving Computing Science, a student must be registered for a semester in which
the 61st or higher credit hour is to be taken and normally will be expected to
have commpleted or be registered in a semester completing the 57th credit hour.
Other cases will be reviewed and determined by the Department.

3. To be formally accepted into a minor or major program the student will be required
to have a CGPA of 2.25 or higher at the time of acceptance. The usual higher
average for honours entry will continue to be applied.

4. To remain in a minor or major program the student will be required to maintain a
CGPA of 2.25 or higher. The usual higher average required to continue in an
honours program will continue to be applied.

5. Entry to and registration in any upper division Computing Science course requires

   (a) That the student be or have been formally accepted into one of these minor or
   major or honours programs involving Computing Science and be eligible to continue
   in the program, or

   (b) That the student have completed or be registered in a semester completing the
   57th or higher credit hour and have a CGPA of 2.25 or higher. Other cases may be
   reviewed and determined by the Department.

   For entry and registration in subsequent Computing Science upper division courses the
   student will be required to maintain a CGPA of 2.25 or higher.

6. If during a semester (for example during pre-registration), Departmental
assessment is made on the basis of student record then available and decision is
to formally accept the student into one of these programs, or to permit the
student to register for one or more upper division courses in Computing Science,
that decision shall stand for the immediately approaching (or just commenced)
semester. It will not be cancelled because of results known at the end of term,
other than for failure to complete prerequisites, or action under general
University regulations resulting in Required to Withdraw or Permanent Withdrawal
status, or other General regulations. It will not automatically stand for later
semesters; updated date would apply.

   If the academic record at the time of review was too low for a student to be
authorised for acceptance to a program or to take upper division courses but the
end of term record for the semester just completed is adequate, the student then
may seek adjustment through the Department and following general regulations
either

(a) proceed through In-person registration if not already registered, or

(b) proceed through adjustment through the Course-Change period, if already registered.

7. For students entering Simon Fraser University on the basis of work elsewhere the CGPA will be taken to be that determined under admissions regulations, normally on courses which can be considered for transfer. After transfer the CGPA is based on Simon Fraser University courses. Exceptional cases may be considered by the Department.

8. Where the average of a student accepted into a program drops below that required the earlier formal acceptance is no longer valid unless reviewed by the Department and waiver granted for continuance.

9. Prerequisites for any course may be waived for individual students by the Department. In order for a course to be accepted as fulfilling a prerequisite a student must have a grade of C or higher.

10. No student will be permitted to register for more than three upper division Computing Science courses unless specifically permitted to do so by the Department. No student with a CGPA<2.6 will be permitted to register for more than two upper division Computing Science courses unless specifically permitted to do so by the Department.

11. The effective date for commencement of these regulations will be to affect registrations for and after the Spring semester, 1982. They will apply generally to all students for then and thereafter granted or being granted formal acceptance into these programs or, if not in a Computing Science program, to students desiring to undertake one or more upper division courses in Computing Science (unless waiver is granted by the Department).

As it is not desired to impose hardship on students who already are well advanced in their Computing Science programs, the following provisions will apply to such students whose records would indicate as of 1 January, 1982, that they would require not more than sixty credit hours to complete the degree:

(a) A student who lacks thirty or fewer credit hours needed to complete degree requirements will have one year to complete without impact from these new regulations - (to December 1982).

(b) A student who lacks thirty-one to sixty credit hours needed to complete degree requirements will have two years to complete without impact from these new regulations - (to December 1983).

(c) The Department may consider further these or other exceptional cases to lessen hardship.

SIMON FRASER UNIVERSITY   ATTACHMENT #2
M E M O R A N D U M

TO: Computing Science Faculty   FROM: Nick Cercone

SUBJECT: Control of Enrolment   DATE: 23 September 1981

Table 1 illustrates the growth and popularity of the Computing Science programme
in terms of the numbers of students enrolling in our courses.

Computing Science Undergraduate Enrolment

Semester	FTE	Enrolment	Honours	Majors	Minors	Total
1974-2	23	81				
1974-3	94	467				
1975-1	91	320				
1975-2	40	216				
1975-3	126	641				
1976-1	132	709				
1976-2	57	304				
1976-3	155	788				
1977-1	143	765				
1977-2	72	369	6	47	11	64
1977-3	165	863	5	82	27	114
1978-1	150	780	8	91	27	126
1978-2	75	534	4	61	2	69
1978-3	220	1129	12	110	33	155
1979-1	198	1054	10	129	33	172
1979-2	97	528	8	102	28	138
1979-3	268	1381	11	174	44	229
1980-1	236	1262	11	195	43	249
1980-2	159	848	10	178	33	221
1980-3	314	1640	9	263	50	332
1981-1	302	1633	11	302	46	359
1981-2		1250	4	307	32	343
1981-3		~2000	10	410	54	474

TABLE 1.

Table 2 illustrates the size of the Computing Science teaching component:

year	FTE	Actual
1974	6.0	
1975	9.5	
1976	11.0	10.5
1977	13.0	11.5
1978	13.0	12.5
1979	12.0	10.5
1980	12.5	10.0

TABLE 2.

It should be clear from Tables 1 and 2 that Computing Science is under extreme enrolment pressure. Table 3 illustrates that these pressures are at both the lower and upper division levels. The problems are rather different for each of these categories.

Course	Allocated	Actual	Requests	Alloc/Actual
001	170	159	212	93
103	790	712	1062	90
105	151	129	246	85
118	142	136	203	95
142	20	19	28	95
201	130	96	152	73
205	110	99	137	90
250	6	6	8	100
260	96	57	73	59
283	24	22	36	91
290	90	85	167	94
301	42	42	50	100
305	50	43	52	86
350	25	24	36	96
351	46	41	53	89
354	60	54	66	90
370	51	51	85	100
371	60	53	60	88
393	25	26	46	104
400	55	52	65	94
405	37	39	45	105
410	40	43	78	107
426	25	22	24	88
427	20	16	22	80
428	6	3	3	50
429	4	3	3	75
493	25	20	28	80
494	6	7	11	116
28 Courses	2307	2060	3053	89

TABLE 3.

I would like to suggest some methods to ease enrolment pressures, both with and without explicit rules, which allow maximum practical student flexibility.

CHANGES TO UNDERGRADUATE CALENDAR

(1) Lower division Math courses.
The Calendar lists Math 101, 151, 152, and 216 as required courses for Computing Science majors. Nowhere in the course descriptions are these courses listed in a prerequisite structure. I would suggest that we list Math prerequisites where appropriate, e.g., Math 151, 152 as prerequisites for CMPT 201, 205, etc.

(2) General Prerequisite structure.
The general prerequisite structure badly needs overhauling; it is just too out of date. We all voice complaints when students are not properly prepared for our courses. Its time that our prerequisite structure reflects what we actually expect students to know when they get into a course.

(3) CMPT 103/104.
Consider making Math-11, Math-12, or CMPT-11 a prerequisite for CMPT 103. We may want to schedule certain groups of CMPT 103 for majors only. This would only be a short term solution and perhaps having a seperately numbered course for majors would be the long term solution.

(4) Typical Plan.
Place a typical plan for majors in the calendar similar to Biological Sciences or Chemistry entries.

(5) Course Changes.
Some courses are almost certainly listed at the wrong level. For example, CMPT 283 should have the language pre-requisite removed and be upgraded to CMPT 383. Further discussion of CMPT 110, CMPT 250, CMPT 404, and all the CMPT 121, 131, etc. should initiate action regarding their future offerings. Also our present calendar indicates that Discrete Optimisation (MATH 408) would count as Computing Science credit when in fact it does not.

(6) Fee Structure.
Investigate the feasibility and implication of fee structures for our laboratory-oriented courses, for example, $15 for CMPT 103, $25 for CMPT 290/291, etc.

UPPER DIVISION CONTROLS

Table 4 summarises the majors and honours in Computing Science for the 12 month period 80-2, 80-3, and 81-1. Of the total (505 students) 40 are intended majors and 465 are declared majors.

Summary of Majors and Honours

CUM GPA	LT 60	60-74	75-89	GE 90	TOT
GE 2.6	87	43	41	59	231
2.25-2.59	42	22	11	25	100
2.0-2.24	21	7	9	14	51
LT 2.0	103	13	2	6	124
TOTAL	253	85	63	104	505

TABLE 4.

As suggested by Dean Calvert, it is reasonable to expect that all students electing to take upper division Computing Science courses have declared their major in Computing Science or some other discipline. I would like to see us adopt the following rules since (i) something MUST be done immediately to make the SCUS and Senate meetings next week and provide relief for this Department by Spring, 1982; and (ii) the School of Business Administration has put forward a similar proposal and we would not need to 'break the ground' for a different approach (which is time consuming). The rules I propose are as follows:

(1) Core courses for Computing Science majors and honours include CMPT 301, 354, 400, 405, and 493. Other popular and important courses include CMPT 305, 351, 370, 393, and 410. Each of these courses involves difficult material and frequently substantial student projects are assigned. Even with the assistance of a

qualified Teaching Assistant, the quality of the course cannot be maintained when the enrolment exceeds 50 students; it is generally agreed that the enrolment be limited to 40 students where possible (and 25 students in the case of CMPT 393). The availability of qualified faculty currently limits the number of offerings for these courses to at most three per year for CMPT 405 while most are offered only once or twice a year. Consequently, on the basis of the frequency of core course offerings the number of major and honours students that can be handled each year must be limited to at most 150 and preferably 120 students.

In 1980-3, 81-1, and 81-2, 300 new majors were declared in Computing Science. Table 4 allows us to estimate that about 35% of Computing Science majors/honours have a CGPA below 2.25 (although 70% of those 35% are lower division declarations). Therefore I recommend that for the three semester period 82-1, 82-2, and 82-3, only students with a CGPA above 2.4 should be allowed to declare a Computing Science major or enrol in a Computing Science course if they have more than 60 credit hours and are not a major. This can be administered in a manner parallel to that proposed by Business Administration and specifically in accordance with the attached regulations.

Entry to major (i.e. declaration of major) is controlled by a scheme similar to that being proposed by Business Administration, thus

CGPA >2.6 guaranteed
CGPA<2.25 no entry

Each year (each semester?) an entry CGPA between 2.25 and 2.6 is established to allow control of the number of majors. The number of new majors each year should be limited to N (say 200).

(2) No registration unless 60 credit hours have been completed.

(3) Priority given to Computing Science majors. Enrolment limitation by controlling the number of declared majors/honours will not necessarily reduce the pressure on upper division courses for 2-4 semesters. Thus, for that period of time, possibly indefinitely, it will be necessary to institute an equitable system of priorities for admission in specific courses. Within the populations of majors and non-majors priority is given on the basis of (i) majors/honours – senority (i.e. credit hours); and – participation in CO-OP (i.e. CO-OP students require priority because of their loss of flexibility), and (ii) non majors/honours – seniority

This implies that pre-registration applications which have one or more CMPT courses listed would need to be in the Registrar's hands early, before anyone else can be registered. I'm not sure that even with early pre-registration the Registrar would be able to help us here.

This procedure can not be implemented by advertising the fact that all students requesting upper division Computing Science courses must file their pre-registration forms with the Registrar by a special early deadline. Such applications will be assigned priorities on the basis of seniority. Those received later will be handled sequentially in the normal way.

(4) Allow no student to take more than three upper division CMPT courses per semester. For students with CGPA<2.6, this maximum would be two upper division courses.

(5) Qualifying students have guaranteed entry.

These rules represent a strategy which will certainly allow us to control numbers in upper division courses within about a year. In the first semester they will have limited effect. Thus the priority system MUST be implemented immediately.

LOWER DIVISION CONTROLS

The ultimate control of this very difficult problem would be for students to declare their major at the time they enter the University. Obviously it is not immediately possible to do this. The priority scheme proposed for Upper Division courses would not be effective for CMPT 103/104 but might be of marginal value for CMPT 105, 118, 201, 205, 260, and 290/291. I would propose the following for lower division courses:

(1) Enforce the prerequisite structure and place the required Math courses in the prerequisite structure in the appropriate places by the next Calendar.

(2) Segment CMPT 103 into two courses: CMPT 101 for majors and honours only and CMPT 103 for non-majors.

(3) Raise the minimum grade required for a prerequisite course from C- to C.

Rationale for the three measures stated above can be summarised as follows. Current staffing levels and available computing facilities combine to limit the number of possible student places in the current CMPT 103 to about 800 (day and evening commbined) students per semester or about 2400 students per year. The total number of new students entering SFU in the past year (81-1, 81-2, and 81-3) was 4000. Thus CMPT 103 can handle 60% of all new students. If accurate projections indicate correctly that 3000 of these students are likely to need CMPT 103 (400 Computing majors, minors, etc., 300 Science students, 1300 Business students, 50% of all others or 1000), then it appears likely that CMPT 103 will continue to feel enrolment pressuure. A major policy decision must be made as to the level of enrolment the facilities and staff should be designed to handle. In the meantime the measures listed above would help with the other lower division courses.

UPPER AND LOWER DIVISION COURSES

Any student dropping a Computing Science course will be given the warning "Student advised of low future enrolment priority for this course". The student will not be allowed to pre-register for that course in any of the next two semesters and will be admitted to that course only if space exists (during the ADD/DROP period in each of the next two terms).

Course scheduling should be done in such a way that course times are fixed as far in advance as possible to allow students to plan reasonable schedules. Whenever important courses conflict, and students know this in advance, careful scheduling should result.

1. **Calendar Information**   Department: __COMPUTING SCIENCE__

   Abbreviation Code: __CMPT__ Course Number: __101__   Credit Hours: __4__ Vector: __1-0-3__

   Title of Course: __INTRODUCTION TO PROGRAMMING LANGUAGE FOR COMPUTING MAJORS/MINORS/HONORS__

   Calendar Description of Course:
   This course introduces the Computing Major/Minor/Honors student to a programming language.   Programming assignments cover techniques such as looping, decision-making, construction of subroutines, input/output handling and documentation. Emphasis will be given to teaching the student techniques of structured programming.

   Nature of Course   Lecture and Open Laboratory

   Prerequisites (or special instructions): B.C. High School Algebra 12 (or equivalent) or MATH 100-3.   Students with credit for CMPT 103 may not receive further credit for CMPT 101.

   What course (courses), if any, is being dropped from the calendar if this course is approved:
   > none

2. **Scheduling**

   How frequently will the course be offered?   day and evening each semester

   Semester in which the course will first be offered?   Spring 1982

   Which of your present faculty would be available to make the proposed offering possible?   S. Caplin

3. **Objectives of the Course**

   to provide the CMPT MAJOR/MINOR/HONOR student with a fuller background in a programming language to better equip him/her for upper division courses.   CMPT 103-4 will be retained for students wishing to learn a programming language but who do not wish to specialize.

4. **Budgetary and Space Requirements** (for information only)

   What additional resources will be required in the following areas:

   Faculty   none

   Staff   none

   Library   none

   Audio Visual none

   Space   none

   Equipment   none

5. **Approval**

   Date: September 23, 1981 _____   23 Sep/81 _____   _____

   _____L. A. Greene_____ _____J. W. Robert_____   _____
   Department Chairman   Dean   Chairman, SCUS

SCUS 73-34b: (When completing this form, for instructions see Memorandum SCUS 73-34a.

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1. Calendar Information   Department: __COMPUTING SCIENCE__

   Abbreviation Code: __CMPT__ Course Number: __103__   Credit Hours: __4__ Vector: __1-0-3__

   Title of Course: INTRODUCTION TO A PROGRAMMING LANGUAGE - FOR NON COMPUTING SCIENCE
                                      MAJORS/MINORS/HONORS
   Calendar Description of Course:

              unchanged

   Nature of Course   Lecture and Open Lab

   Prerequisites (or special instructions):   B.C. High School Algebra 12 (or equivalent) or
       MATH 100-3.   Students with credit for CMPT 103 under its former title, or CMPT 101
       may not receive further credit for this course.

   What course (courses), if any, is being dropped from the calendar if this course is
   approved:

2. Scheduling

   How frequently will the course be offered?   day and evening each semester

   Semester in which the course will first be offered?   Spring 1982

   Which of your present faculty would be available to make the proposed offering
   possible?   S. Caplin

3. Objectives of the Course

4. Budgetary and Space Requirements (for information only)

   What additional resources will be required in the following areas:

   Faculty

   Staff

   Library

   Audio Visual

   Space

   Equipment

5. Approval

   Date: September 23, 1981   23 feb/r81   _____

      _____   _____   _____
       Department Chairman   Dean   Chairman, SCUS

SCUS 73-34b: (When completing this form, for instructions see Memorandum SCUS 73-34a.