HONOURS BSC (COMPUTER SCIENCE) CO-OPERATIVE PROGRAM TB
Five Year program

Notes:
1. There are two focus areas in this program: Business Focus and Science Focus. Students must choose one at the time of initial registration. For help in making this choice, contact the Chair of the Department of Computer Science.
2. Year-to-year continuation in the program requires an average of at least 70% in all Computer Science courses, and satisfactory completion of the work term assignments.
3. Students in this program are required to take at least five FCEs outside the Departments of Computer Science and Mathematical Sciences.
4. Electives from the list of program electives (see below) must include at least three of: 4478, 4475, 4471, 4311, 4312, 4476. Additionally students seeking to satisfy a specialization in the department must choose appropriate computer science electives.
5. Students completing the Business Focus program requirements and wishing to qualify for the Entrepreneurship Certificate in the Faculty of Business Administration must, instead of Business 1013, take as an elective a course from the following list: Business 2033, 3013, 3213, 3413, 4253; or an alternate approved by the Faculty of Business Administration.
6. In the Science Focus at least one FCE elective from Type C courses (except Engineering) must be at the second year level or higher, and such specified electives must not include zero level courses.
7. Students following either the Science Focus or Business Focus and wishing to pursue scientific computing should choose Mathematics 3351 and/or Mathematics 3371 and should choose the necessary prerequisites from Mathematics as part of their electives (with attention paid to Note 3 above).

First Year (Fall and Winter):
(a) Mathematics 1171, 1271
(b) Computer Science 1411, 1431
(c) One FCE elective chosen from any combination of first year English, History or Philosophy
(d) One FCE elective
Business Focus:
(a) Business 1511, 1512
Science Focus:
(a) One FCE elective from Type C courses (except Engineering)
First Year (Spring/Summer):
At the discretion of the Chair of the Department, some students may have the opportunity of a formal work term assignment (Computer Science 1990).

Second Year (Fall and Winter):
(a) Mathematics 2310, 2255
(b) Computer Science 2412, 2430, 2453, 2476, 2477
(c) One-half course elective
Business Focus:
(a) Business 2514, 2538
Science Focus:
(a) Sociology 2755
(b) One half-course elective from Type C courses (except Engineering)
Second Year (Spring/Summer):
Optional formal work term assignment (Computer Science 2990)

Third Year (Fall):
(a) Computer Science 3413, 3415, 3473
Business Focus:
(a) Sociology 2755
(b) Business 3215
Science Focus:

(a) One-half FCE elective from list of program electives
(b) One-half FCE elective

Third Year (Winter):
Formal work term assignment (Computer Science 3990)

Third Year (Spring/Summer):
Formal work term assignment (Computer Science 3992)

Departmental approval must be obtained at the time of registration in co-op work term courses by all students at third year level or higher.

Fourth Year (Fall and Winter):
(a) Computer Science 4411, 4453
(b) Computer Science 4433
(c) One FCE from list of program electives

Business Focus:
(a) One-half FCE from list of program electives
(b) Two FCE electives

Science Focus:
(a) One FCE elective from Type C courses (except Engineering)
(b) One and one-half FCE elective.

Fourth Year (Spring/Summer):
Formal work term assignment (Computer Science 4990)

Fifth Year (Fall):
Formal work term assignment (Computer Science 4992)
Departmental approval must be obtained at the time of registration in co-op work term courses by all students at the third year level or higher.

Fifth Year (Winter):
(a) Either Computer Science 4431 or 4432 or 4434
(b) One FCE elective from list or program electives
(c) One FCE elective

List of Program Electives

Computer Science 4111 - Clinical Decision Support
Computer Science 4112 - Introduction to Data Science
Computer Science 4413 – Programming Language Processors
Computer Science 4433 - Algorithm Design and Analysis
Computer Science 4451 - Theory of Computing
Computer Science 4471 - Computer Graphics
Computer Science 4475 - Topics in Artificial Intelligence
Computer Science 4476 - Cryptography and Network Security
Computer Science 4478 - Game Programming
Computer Science 4479 - Directed Research in Computer Science
Computer Science 4210 - Special Topics
Computer Science 4310 - Web Health Informatics
Computer Science 4311 - Big Data
Computer Science 4312 - Cloud Computing

Note: The Indigenous Content Requirement is being fulfilled by the one half course Sociology 2755.