

BSC (COMPUTER SCIENCE MAJOR)^{TB}

Three 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 60% in all Computer Science courses.
3. Students completing the Business Focus program requirements and wishing to qualify for the Entrepreneurship Certificate in the Faculty of Business Administration must take Business 3215 and, instead of Business 1013"
[href="/Catalog/ViewCatalog.aspx?pageid=viewcatalog&topicgroupid=18252&entitytype=CID&entitycode=Business+1013"](/Catalog/ViewCatalog.aspx?pageid=viewcatalog&topicgroupid=18252&entitytype=CID&entitycode=Business+1013)">Business 1013, take as an elective a course from the following list: Business 2033"
[href="/Catalog/ViewCatalog.aspx?pageid=viewcatalog&topicgroupid=18252&entitytype=CID&entitycode=Business+2033"](/Catalog/ViewCatalog.aspx?pageid=viewcatalog&topicgroupid=18252&entitytype=CID&entitycode=Business+2033)">Business 2033, 3013, 3213, 3413, 4253, or an alternate approved by the Faculty of Business Administration.
4. 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.
5. 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.

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)

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)

Third Year (Fall and Winter):

- (a) Computer Science 3413, 3415, 3473

(b) Four courses from: Computer Science 4453, or List of Program Electives(see HBSc (Computer Science) Co-operative Program)

(c) One FCE elective

Business Focus:

(a) Sociology 2755

Science Focus:

(a) One half-course elective from Type C courses (except Engineering)

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

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