

# B.Sc. Four-year Computer Science

## C1. College Requirement (15cu)

	6cu from <b>English Language Writing</b>		Y1
			Y1
	<b>Indigenous Learning</b>		
MATH 110 (or 176)	Calculus	<b>Quantitative Reasoning</b>	Y1
MATH 164 (or 266)	Linear Algebra		Y1

## C2. Breadth Requirement (9cu)

	3cu from <b>Humanities or Social Science</b>		
	6cu from <b>Fine Arts, Humanities, Social Science, or Interdisciplinary Studies</b>		

Refer to the [programme description](#) for the full list of courses that fulfill C1 and C2 requirements.

## C3. Cognate Requirement (18cu)

	9 cu from <b>Junior*</b>		
MATH	6 cu from <b>Mathematics List</b>	<b>9 cu Senior</b>	
MATH			
STAT 242 (or 245)	<b>Statistics*</b>		Y2

**Junior: Biology:** BIOL 120, 121; **Chemistry:** CHEM 112, 115, 250;  
**Earth Sciences:** GEOG 120, GEOL 121, 122;  
**Physics&Astronomy :** ASTR 113; PHYS 115, 117 or 125.

**Statistics Note:** Engineering students may use EE 216 or ME 251.  
 Also consult Statistics Course Regulations in [the College policies](#).

**Mathematics List:** **Mathematics:** MATH 112 or 116, 211, 223, 225, 276, 327, 328,  
 MATH 361 and MATH 362;  
**Statistics:** STAT 241, 344, 345, 348;  
**Philosophy:** PHIL 243.

No more than 6 credit units from one subject may be used in C1, C2, and C3 Junior.

## C4. Majors Requirement (51cu)

CMPT 141 (or 116)	Introduction to Computer Science	Y1
CMPT 145 (or 117)	Principles of Computer Science	Y1
CMPT 214	Programming Principles and Practice	Y2
CMPT 215 (or CME 331)	Computer Organization and Architecture	Y2
CMPT 260	Mathematical Logic and Computing	Y2
CMPT 270	Developing Object Oriented Systems	Y2
CMPT 280	Intermediate Data Structures	Y2
PHIL 232	Ethics ... in Computer Science	Y2
CMPT 3__	18cu from CMPT 317, 332, 340, 353, 360, 370, 381	Y3/4
CMPT 3__		Y3/4
CMPT 3__		Y3/4
CMPT 3__		Y3/4
CMPT 3__		Y3/4
CMPT 3__		Y3/4
CMPT 3__		Y3/4
	3cu from <b>Senior CMPT*</b>	Y3/4
CMPT 4__	6cu from CMPT410 or higher	Y3/4
CMPT 4__		Y3/4

**Senior CMPT: Computer Science:** 300- or 400-CMPT **Bioinformatics:** BINF 300  
**Computer Engineering:** CME 332, 334, 341, 342, 433, 435

## C5. Electives Requirement (27cu)

	<b>Business Science*</b>	
	Courses to complete the requirements for 120cu Four-year program, of which at least 66 must be at the 200-level or higher.	

**Business Science Note:** If ECON 111 or 114 is used to meet C2, the slot becomes a free elective. Otherwise, the slot is a Business Science Requirement from the following list:  
**Commerce:** COMM 102, 105, 201, 203, 204, 205, 210, 304;  
**Economics:** ECON 111, 114;  
**Agricultural Economics:** AREC 230;  
**Entrepreneurial Ventures:** ENT 210, 220, 230.