

# B.Sc.Four-Year Applied Computing (Geomatics)

## C1. College Requirement (15cu)

	6cu from <b>English Language Writing</b>		
	<b>Indigenous Learning</b>		
MATH 163	Mathematical Reasoning	<b>Quantitative Reasoning</b>	Y1
MATH 164	Linear Algebra		Y1

## C2. Breadth Requirement (6cu)

	6cu from <b>Fine Arts, Humanities, Social Science, or Interdisciplinary Studies</b>		
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Refer to the [programme description](#) for the full list of courses that fulfill C1 and C2 requirements

## C3. Cognate Requirement (12cu)

	9 cu from <b>Junior*</b>		
PHIL 232	Ethics ... in Computer Science		Y2/3/4

**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.

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

## C5. Electives Requirement (27cu)

	Courses to complete the requirements for 120cu Honours program, of which at least 66 must be at the 200-level or higher.	
	Pre-requisites for chosen majors courses fit here	

## C4. Majors Requirement (60cu)

CMPT 141	Computing in the Biological Sciences	Y1
CMPT 145	Introduction to Computer Science	Y1
GEOG 1__	One of GEOG 120, GEOG 125, or GEOG 130	
CMPT 260	Mathematical Logic and Computing	Y2
CMPT 270	Developing Object-Oriented Systems	Y2
CMPT 280	Intermediate Data Structures	Y2
GEOG 222	Introduction to Geomatics	Y2
STAT 245	Introduction to Statistical Methods	Y2
CMPT 318	Data Analytics	Y3
CMPT 384	Information Visualization	
GEOG 302	Quantitative Methods in Geography	Y3
GEOG 322	Introduction to Geographic Information Systems	Y3
GEOG 323	Remote Sensing	Y2
CMPT 487	Image Processing and Computer Vision	Y4
CMPT ____	12 credits from List 1 – can be from different foci	Y2/3/4
CMPT ____		Y2/3/4
CMPT ____		Y2/3/4
CMPT ____		Y2/3/4
	6 credits from List 2 – can be from different foci	Y3/4
		Y3/4

**List 1: Software Engineering:** CMPT 214, CMPT 353, CMPT 370

**Analytics:** CMPT 317, CMPT 360, CMPT 423, CMPT 489

**User Interfaces and Visualization:** CMPT 381, CMPT 481, CMPT 484

**List 2: Planning:** PLAN 350, PLAN 360, PLAN 390

**Geography:** GEOG 420, GEOG 423

**NOTE:** Students interested in the CS Professional Internship Programme must take CMPT 370 in Y3.