# B.Sc. Double Honours Computer Science - Major 1

## C1. Science Requirement (15cu)

CMPT 141 (or 116)	Intro to Computer Science	1
CMPT 145	Principles of Computer Science	1
	Select additional 9cu from Science Areas below; no more than 6cu from any one area.	
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Science Areas: 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.

## C2. Humanities Writing Requirement (6cu)

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## C3. Social Science Requirement (6cu)

#### C5. General Requirement (6cu)

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No more than 6 credit units in C2, C3, or C5 from any one subject.

See the College Website for a full list of courses that meet requirements C2, C3, C5:

https://programs.usask.ca/arts-and-science/computer-science/index.php

## C4. Mathematics Requirement (6cu)

MATH 110 or 176	Calculus I	1
MATH 164 (264) or 266	Linear Algebra	2

#### C7. Open Electives Requirement (3-9cu)

Arts and Science courses, or other approved courses,	
to complete 120 credit unit Double Honours program;	
at least 66 must be at the 200-level or higher.	

## C6. Major 1 (36cu)

CMPT 214	Programming Principles	2
CMPT 215	Computer Organization	2
CMPT 260	Math. Logic and Computing	2
CMPT 270	Object Oriented Systems	2
CMPT 280	Intermediate Data Structures	2
CMPT 360	Machines and Algorithms	3
CMPT 364	Automata and Formal Languages	3
CMPT 400	Research Topics in Computer Science	4
CMPT	9cu from: 317, 332, 340, 353, 370, 381	3
CMPT		3
CMPT		3
CMPT	3cu from: 410 or higher	4

## C7. Major 2 (36-42cu)

The prerequisite structure of courses in <b>Major 1</b> of this program assumes 9 credit units of Mathematics or Statistics, 6 credit units of which are required in <b>C4</b> . Students wishing to combine this program with another double honours program will need at least 3 additional credit units in Mathematics or Statistics (STAT 245 recommended).	
Students wishing to combine this program with a <b>Double Honours - Major 2</b> in a <b>Type C</b> program that requires additional Mathematics or Statistics beyond those stated in <b>C4</b> will be able to meet all prerequisites of courses in <b>Major 1</b> of this program. However, students in majors with minimal mathematics requirements may not be able to meet the prerequisites for courses in <b>Major 1</b> without taking additional Mathematics or Statistics. For these students, the recommended courses are MATH 110, MATH 266 or MATH 164 (264), STAT 245.	

For further details, please see the <u>Academic Information & Policies</u> in the Arts and Science section of the Calendar.