B.Sc. Honours Applied Computing (Data Analytics)

Students are reminded that admission to honours is by <u>application to the College</u>, after completing 30 credit units at USaskatchewan with a 70% CWA overall and in CMPT courses. Admission to CMPT407 will be refused to students who are not admitted to honours.

C1. College Requirement (15cu)

	6cu from English Langua	age Writing	
	Indigenous Learning		
MATH 163	Mathematical Reasoning	Quantitativa Dagagaina	Y1
MATH 164	Linear Algebra	Quantitative Reasoning	Y1

C2. Breadth Requirement (6cu)

6cu from Fine Arts, Humanities, Social Science, or	
Interdisciplinary Studies	

Refer to the programme description for the full list of courses that fulfill C1 and C2 requirements

C3. Cognate Requirement (12cu)

	9 cu from Junior *	
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 (9–12cu)

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

CMPT 141	Computing in the Biological Sciences	Y1
CMPT 145	Introduction to Computer Science	Y1
MATH 110 (or MATH 176)	Calculus I	
MATH 116 (or MATH 177)	Calculus II	
CMPT 260	Mathematical Logic and Computing	Y2
CMPT 270	Developing Object-Oriented Systems	Y2
CMPT 280	Intermediate Data Structures	Y2
MATH 211	Numerical Analysis I	Y2
MATH 266	Linear Algebra II	Y2
STAT 241	Probability Theory	Y2
STAT 24_	STAT 242 or STAT 245	Y2
CMPT 317	Introduction to Artificial Intelligence	Y3/4
CMPT 318	Data Analytics	Y3/4
CMPT 360	Machines and Algorithms	Y3/4
CMPT 384	Information Visualization	Y3/4
STAT 344	Applied Regression Analysis	Y3/4
STAT 345	Design and Analysis of Experiments	Y3/4
STAT 346	Multivariate Analysis	Y3/4
CMPT		Y2/3/4
CMPT	12 credits from CMPT 214, CMPT 353, CMPT 370,	Y2/3/4
CMPT	CMPT 394, CMPT 484, CMPT 489	
CMPT		
CMPT 407 or MATH 402	Honours Thesis	Y4
CMPT 423	Machine Learning	Y4
MATH	6 credits from MATH 238, MATH 313, MATH 314,	Y2/3/4
MATH	MATH 325, MATH 327	Y2/3/4

NOTE: Students interested in the CS Professional Internship Programme

must take CMPT 370 in Y3.