## B.Sc. Honours Computer Science

Students are reminded that admission to honours is by application to the Department, after completing second-year (CMPT214, 215, 260, 270, and 280) with a $70 \%$ CWA overall and in CMPT courses. Admission to CMPT400 will be refused to students who are not admitted to honours.

## C1. College Requirement ( 15 cu )

|  |  |  |
| :--- | :--- | :---: |
|  | 6cu from English Language Writing |  |
|  | Indigenous Learning |  |
|  | Mathematical Reasoning | Quantitative Reasoning |
|  |  |  |
| MATH 163 164 | Linear Algebra |  |

## C2. Breadth Requirement (9cu)

|  | 3cu from Humanities or Social Science |  |
| :--- | :--- | :--- |
|  | 6cu from Fine Arts, Humanities, Social Science, or <br> Interdisciplinary Studies |  |
|  |  |  |

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

## C3. Cognate Requirement (12cu)

|  | ${ }^{2}$ cu from Junior |  |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
| PHIL 232 (or GE 449) | Ethics ... in Computer Science | 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.
No more than 6 credit units from one subject may be used in $\mathrm{C} 1, \mathrm{C} 2$, and C 3 Junior.
C5. Electives Requirement (21cu)

|  | Business Science*** |
| :---: | :---: |
|  | Courses to complete the requirements for 120cu Fouryear program, of which at least 66 must be at the 200level or higher. |
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C4. Majors Requirement (63cu)

| 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 |
| CMPT 3_- |  | 18cu from Core CMPT : <br> CMPT 317, 332, 340, CMPT 360 is required CMPT 353, 370, 381 | Y3/4 |
| CMPT 3_- |  |  | Y3/4 |
| CMPT 3_- |  |  | Y3/4 |
| CMPT 360 | Algorithm Design |  | Y3/4 |
| CMPT 3- |  |  | Y3/4 |
| CMPT 3_- |  |  | Y3/4 |
| CMPT 364 | Automata and Formal Languages |  | Y3/4 |
| CMPT 400 | Honours Thesis (must apply to register) |  | Y3/4 |
|  | 6cu from CMPT 410 or higher <br> and at most 1 of CME433, 435, 451 |  | Y3/4 |
|  |  |  | Y3/4 |
| MATH 110 (or 133 or 176) | Calculus 1* | Mathematics | Y1 |
| MATH 116 (or 134 or 177) | Calculus 2 |  | Y1 |
| STAT 241 | Probability Theory | Statistics | Y2 |
| STAT 242 (or 245) | Statistics** (or EE216 or ME 251) |  | Y2 |

Mathematics Note: * Students with credit in other Junior MATH (MATH104, 121, 125)
must complete MATH110 (or 176) and will lose credit for that previous
Junior MATH. Contact the Math department for an override into MATH110.
Statistics Note:** Alternative STAT coursework (PLSC214 or PSY233+234 or COMM104+207
[c.f. Statistics Course Regulations]) with a grade of $70 \%$ or higher may be used

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\text { But the substituted courses will not grant admission to CMPT394, 423, or } 489 .
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Business If ECON 111 or 114 is used to meet C2, the slot becomes a free elective.
Science Otherwise, the slot is a Business Science Requirement from the following list:
Note:*** Commerce: COMM 102, 105, 201, 203, 204, 205, 210, 304;
Economics: ECON 111, 114;
Agricultural Economics: AREC 230;
Entrepreneurial Ventures: ENT 210, 220, 230.

