

Freshman/Foundation Program (U0): Computer Science & Software Engineering

U0 courses to take if you plan on doing a Computer Science or Software Engineering program:

COMP 202 – Foundations of Programming (3 credits) MATH 133 – Linear Algebra & Geometry (3 credits) MATH 140 – Calculus 1 (3 credits) MATH 141 – Calculus 2 (4 credits) **

Students should have these 13 credits, in addition to completing the remaining requirements of the <u>30 credit Freshman/Foundation U0 Program</u>. Students must complete the U0 Program *before* they take courses required for their desired Major.

Faculty of Science Freshman/Foundation requirements | Faculty of Arts Freshman/Foundation requirements

- **Bachelor of Arts** students are not *required* to complete all three MATH courses for their Freshman/Foundation Program, but are *strongly encouraged* to take *at least* MATH 133 in their U0 as math background is essential.
- Bachelor of Science students who have not taken Biology, Chemistry, and/or Physics at the grade 12 level should include any missing subjects into their Freshman/Foundation Program courses.
- Students who do NOT take **COMP 202** in their U0 year may still enter a CS or Software Eng program, but might have to start with **COMP 202** in their U1 year unless they have prior programming experience.
- Students interested in the <u>Cognitive Science Minor</u> may also want to take **PSYC 100** Introduction to Psychology.
- Students interested in <u>Joint Major Physics and Computer Science</u> program must take PHYS 131 Mechanics and Waves and PHYS 142 Electromagnetism and Optics.
- Students interested in <u>Joint Major Computer Science and Biology</u> program must take **BIOL 111** Organismal Biology and **BIOL 112** Cell and Molecular Biology.

******Choosing your Calculus Courses

- Students with no previous knowledge of Calculus should take **MATH 139** *Calculus 1 with Precalculus*, followed by **MATH 141** *Calculus 2*.
- Students with high school calculus who are interested in <u>Joint Honours Mathematics and Computer Science</u> program are strongly advised to consider taking the more challenging calculus sequence, **MATH 150** *Calculus A* and **MATH 151** *Calculus B* (rather than **MATH 140** and **MATH 141**).