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 30 credit Freshman/Foundation U0 Program.*
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 **Cognitive Science Minor** may also want to take **PSYC 100 Introduction to Psychology**.
- Students interested in **Joint Major Physics and Computer Science** program must take **PHYS 131 Mechanics and Waves** and **PHYS 142 Electromagnetism and Optics**.
- Students interested in **Joint Major Computer Science and Biology** 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 **Joint Honours Mathematics and Computer Science** 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**).