

Computer Science Program Orientation What courses should I take in U0/U1?

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CS Program Organization

- A common set of core courses (for all majors, minors, joint programs), covering basic programming, algorithms and math
- A set of complementary courses, which give flexibility to specialize (e.g. graphics, databases, Al, networks, ...)
- Elective courses can be taken in (almost) any department (e.g. general interest, or more CS courses)

First CS Course at McGill

- If you have programmed before, in any programming language, take COMP 250
- If you have never programmed before, take COMP 202 or COMP 204 or COMP 208

NOTE: COMP 202/204/208 cannot be taken for credit with or after COMP 250. It does NOT make sense to take them at the same time (and you cannot get credit for both if you do it)

COMP 202 / 204 / 208 Which one is the right one for me?

- All of them are roughly covering the same material using Python
- **COMP 202:** can be taken by any student at McGill and only requires CEGEP level (or grade 12 level) math background. Students doing a B.Sc. can take it as a Complementary course in the Freshman Science Program.
- **COMP 204:** can be taken by students who have a background in life sciences; has BIOL 112 as a prerequisite; be comfortable with basics of cell biology and genetics
- **COMP 208**: part of several B.Eng. and some B.Sc. programs in the physical sciences; requires CEGEP level background in math; has Calculus 2 (MATH 141) as a prerequisite and Linear Algebra and Geometry (MATH 133) as a co-requisite.

UI, No Prior Background

- Take COMP 202 / 204 / 208 in the first term, along with MATH courses (240, 222, 223, 323 are all possible) and electives (COMP 189 and COMP 230 are among electives)
- Take MATH 240 early; it is a prerequisite for COMP 251
- In the second term, you can take COMP 250 and COMP 206, and MATH + electives

UI, Prior Programming

- In Fall: COMP 250 and COMP 206 and MATH 240 (highly recommended prerequisite for COMP 251)
- In Winter: COMP 251 and COMP 273 (along with MATH / electives)

How many courses should I take?

- I credit in a course translates to 3 hours of work per week Hence,
 - a 3-credit course means an average work load of 9 hours per week (including the class time)
 - Taking 5 courses with 3-credits each means a work load of 45 h per week!
 - Many students take 4 courses (which translates to 36 h per week) to have time for extra-curricular activities.
- Not all courses are of the same difficulty; a higher course number does not necessarily mean that the course is more difficult, it requires more background.
- Many CS courses involve programming assignments or projects which can be time consuming

Still unsure? Questions?

- Check out: https://www.cs.mcgill.ca/academic/undergrad/advising/
- General CS Advising regarding courses and degree: Liette Chin liette.chin@mcgill.ca
- General questions regarding COMP 202 and COMP 250: Prof. G. Alberini giulia.alberini@mail.mcgill.ca
- Chief Academic Advisor: Prof. C. Verbrugge clump@cs.mcgill.ca
- Chair of Undergrad. Affairs: Prof. B. Pientka <u>bpientka@cs.mcgill.ca</u> and Prof. J. Vybihal <u>joseph.vybihal@mcgill.ca</u>

CS Advisors - We are here to help

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- General questions regarding COMP 202 and COMP 250: Prof. G. Alberini giulia.alberini@mail.mcgill.ca
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