

BACHELOR OF COMPUTING (B.COMP.)

Students graduating from this program obtain a solid foundation in the theory and application of all aspects of computing and information science. Core subjects, combined with in-depth study in an area of application, give students the freedom to combine their interests in computing with other areas of study and application.

There are two majors available in the Bachelor of Computing honours program. The major in Computer Science provides a traditional computing foundation in software, hardware, and theory. The major in Software Engineering contains an emphasis on software development and design and has a greater focus on team work, communication skills, and professional standards.

Course projects are based on real-world software development scenarios and allows students to get the professional experience valued by today's high-tech employers. The focused study in a second discipline (area of application) gives students the background to effectively apply their knowledge.

Both majors require the equivalent of 8 semesters of successful full-time study. The general program requires the equivalent of 6 semesters of successful full-time study are available. Students in the honours program must choose a major in either Computer Science or Software Engineering. The majors are also available with a Co-op option.

Since not all courses are offered in every semester and prerequisite dependencies must be observed, students are encouraged to consult the program B.Comp. counsellor to plan an initial program of study or when considering modifications to the suggested schedule of studies list.

B.Comp. students who wish to change their program major within the Bachelor of Computing Program must submit an application to the School of Computer Science Program Counselling Office by the last day of classes in the winter semester.

To be eligible after first year, applicants must have successfully completed 4.00 credits in a B.Comp. major with an average of 70% or better. Admission to the major will be competitive based on available spaces.

Students wishing to transfer after second year or third year must have an average of 70% or better in their best 4.00 CIS credits. Admission to the major will be competitive based on available space.

All decisions regarding transfers will be made by the end of June.

Program Information

To graduate with an honours Degree with a major in Computer Science or Software Engineering a student must:

- a. Successfully complete 20.00 credits. These must include the 11.25 CIS credits, a minimum of 4.00 credits in an Area of Application and an additional 4.75 credits as free electives. Not more than 6.00 credits from courses at the introductory (1000) level may be counted towards the 20.00 credit requirement.
The program requires 6.00 Computing and Information Science credits at the 3000 level or above, which must include 2.00 credits at the 4000 level. The area of application requires an additional 1.00 credits at the 3000 level or above. The Area of Application is a

graduation requirement and must be approved by Semester 4 by the faculty advisor.

- b. Obtain a cumulative average at least 70% in CIS courses and a 60% cumulative average in all courses.
- c. An Area of Application normally consists of 4.00 credits (normally 8 courses) of a minor. Minors are described under the B.A. and B.Sc. programs. Access to some courses may be limited. Minors are listed in Section X of the Calendar. A student may complete a minor should they decide to do so.
Students must consult the faculty advisor for approval of their Area of Application by semester 4. Not all disciplines or courses may be available as areas of application.
Students failing to meet the graduation requirements of the honours program may apply to graduate with a general degree if the requirements for the general degree are met.

Continuation of Study

Students are advised to consult the regulations for Continuation of Study which are outlined in detail in Section VIII Degree Regulations Procedures of this calendar.

General Program

School of Computer Science, College of Engineering and Physical Sciences

To graduate from a general program a student must:

1. Earn 15.00 credits. These must include courses that fulfill the distribution requirements of the general Degree (see below). At least 4.00 credits must be at the 3000 level or above. Not more than 6.00 credits at the introductory (1000) level may be counted towards the 15.00 credit requirement.
2. No more than 11.00 credits in any one subject or discipline, as indicated by the course prefix code, can be counted towards a general degree.
3. Successfully complete the following credits:

Code	Title	Credits
CIS*1050	Web Design and Development	0.50
CIS*1300	Programming	0.50
CIS*1910	Discrete Structures in Computing I	0.50
CIS*2430	Object Oriented Programming	0.50
CIS*2500	Intermediate Programming	0.50
CIS*2520	Data Structures	0.50
CIS*2170	User Interface Design	0.75
CIS*3530	Data Base Systems and Concepts	0.50
0.50 additional CIS or STAT credits at the 2000 level or higher		0.50
1.00 additional CIS credits at 3000 level or higher		1.00

4. Earn 2.00 science credits (list of courses available in the Program Counsellor's office) and 2.00 credits in the College of Arts or College of Social and Applied Human Sciences in addition to the courses listed in c.

B.Comp. Programs

- Computer Science (CS) (calendar.uoguelph.ca/undergraduate-calendar/programs-majors-minors/computer-science-cs/)

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- Computer Science Co-op (CS:C) (calendar.uoguelph.ca/undergraduate-calendar/programs-majors-minors/computer-science-co-op-csc/)
- Software Engineering (SENG) (calendar.uoguelph.ca/undergraduate-calendar/programs-majors-minors/software-engineering-seng/)
- Software Engineering Co-op (SENG:C) (calendar.uoguelph.ca/undergraduate-calendar/programs-majors-minors/software-engineering-co-op-sengc/)