

# MINOR IN COMPUTER SCIENCE

Computer science at the School of Electrical Engineering and Computer Science combines the study of computation and information processing fundamentals with their application in the world around us. Computer scientists build fast, reliable, scalable and secure software systems to organize and analyze information. The honours curriculum comprises advanced topics in databases, artificial intelligence, computer graphics, security, distributed computing and algorithm design, culminating in an honours project.

This program teaches graduates how to use their creative and innovative talents to conceive, design and implement software systems. The French Immersion Stream is now available to all students in the Computer Science program. Our degrees are very flexible and include options, minors and a major, which can be used to explore connections between computer science and many other fields of study.

This program is offered in English and in French.

Compulsory courses are offered in English and French.

## Program Requirements

Requirements for this program have been modified. Please consult the 2019-2020 calendars (<http://catalogue.uottawa.ca/en/archives/>) for the previous requirements.

The table below includes only discipline-specific courses. Please refer to the Academic Regulations (<https://www.uottawa.ca/about-us/policies-regulations/academic-regulations/b-2-program-studies/>) for information on including a minor to your degree.

This program can be chosen only as a second study module as part of a 120-unit bachelor's degree that allows a minor.

Direct admission is not possible.

CSI 2110	Data Structures and Algorithms	3 Units
CSI 2120	Programming Paradigms	3 Units
ITI 1100	Digital Systems I	3 Units
ITI 1120	Introduction to Computing I	3 Units
ITI 1121	Introduction to Computing II	3 Units
MAT 1348	Discrete Mathematics for Computing	3 Units
6 optional course units from the list of optional courses <sup>1</sup>		6 Units
6 optional course units in computer science (CSI) or software engineering (SEG) at the 3000 level from the list of optional courses <sup>1</sup>		6 Units
<b>Total:</b>		<b>30 Units</b>

Note(s)

<sup>1</sup>

Suggested sequence of optional courses per field of interest. Note that some courses require prerequisites which are not part of the specific program requirements. Not all 4000 level courses are offered every year.

## List of Optional Courses

### Developing Software for the Visual Arts:

MAT 1341	Introduction to Linear Algebra	3 Units
CSI 2101	Discrete Structures	3 Units
CSI 3105	Design and Analysis of Algorithms I	3 Units
CSI 4130	Computer Graphics	3 Units

### Computing for Biology or Biochemistry:

MAT 1341	Introduction to Linear Algebra	3 Units
CSI 2101	Discrete Structures	3 Units
CSI 3105	Design and Analysis of Algorithms I	3 Units

### Analysis and Design in Information Systems:

CSI 2132	Databases I	3 Units
CSI 3130	Databases II	3 Units
SEG 2105	Introduction to Software Engineering	3 Units
SEG 3101	Software Requirements Analysis	3 Units

### Web-Based Systems and Web Design:

CSI 2132	Databases I	3 Units
CSI 3140	WWW Structures, Techniques and Standards	3 Units
SEG 2105	Introduction to Software Engineering	3 Units
SEG 3125	Analysis and Design of User Interfaces	3 Units