

# HONOURS BSC COMPUTER SCIENCE, MANAGEMENT AND ENTREPRENEURSHIP OPTION

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

Co-operative education is available with this program.

The French immersion stream is available with this program.

Requirements for this program have been modified. Please consult the 2023-2024 calendars (<http://www.uottawa.ca/academic/info/regist/1516/calendars/>) for the previous requirements.

ENG 1112	Technical Report Writing	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 1320	Calculus I	3 Units
MAT 1322	Calculus II	3 Units
MAT 1341	Introduction to Linear Algebra	3 Units
MAT 1348	Discrete Mathematics for Computing	3 Units
CEG 2136	Computer Architecture I	3 Units
CSI 2101	Discrete Structures	3 Units
CSI 2110	Data Structures and Algorithms	3 Units
CSI 2120	Programming Paradigms	3 Units
CSI 2132	Databases I	3 Units
CSI 2911	Professional Practice in Computing	3 Units
MAT 2377	Probability and Statistics for Engineers	3 Units
SEG 2105	Introduction to Software Engineering	3 Units
CSI 3104	Introduction to Formal Languages	3 Units
CSI 3105	Design and Analysis of Algorithms I	3 Units
CSI 3120	Programming Language Concepts	3 Units
CSI 3131	Operating Systems	3 Units
CSI 4900	Honours Project	3 Units
3 course units from:		3 Units
CSI 2372	Advanced Programming Concepts With C++	

or 3 optional course units in computer engineering (CEG), computer science (CSI), electrical engineering (ELG) or software engineering (SEG) at the 3000 or 4000 level

9 optional course units in computer science (CSI) at the 4000 level		9 Units
ADM 1100	Introduction to Business	3 Units
ADM 1340	Financial Accounting	3 Units
ADM 2320	Marketing	3 Units
ADM 3313	New Venture Creation	3 Units
3 optional course units from the list of optional courses in Engineering Management and Entrepreneurship option		3 Units
12 elective course units of non-computing, non-mathematics courses <sup>1</sup>		12 Units
18 elective course units		18 Units
<b>Total:</b>		<b>120 Units</b>

Note(s)

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As electives, students are encouraged to choose 12 course units of humanities or social sciences courses.

## List of Optional Courses

### List of Electives for the Management and Entrepreneurship Option:

ADM 1101	Business and Society	3 Units
ADM 2336	Organizational Behaviour	3 Units
ADM 3118	International Business	3 Units
ADM 3319	Cross-Cultural Management	3 Units
ADM 3326	Advertising and Sales Promotion Management	3 Units
GNG 4120	Technology Entrepreneurship for Engineers and Computer Scientists	3 Units
GNG 4170	Engineering Law	3 Units
PHI 2397	Business Ethics	3 Units