HONOURS BSC IN COMPUTER SCIENCE, DATA SCIENCE 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.

One option from the following: 6 Units

Option 1:
6 optional course units in computer engineering (CEG), in electrical engineering (ELG) or in software engineering (SEG) at the 3000 level; or in computer science (CSI) at the 4000 level

Option 2:
CSI 2372 Advanced Programming Concepts With C++
and 3 optional course units in computer engineering (CEG), in electrical engineering (ELG) or in software engineering (SEG) at the 3000 level; or in computer science (CSI) at the 4000 level

9 course units from:

CSI 4106 Introduction to Artificial Intelligence
CSI 4107 Information Retrieval and the Internet
CSI 4108 Cryptography
CSI 4139 Design of Secure Computer Systems
6 elective course units 6 Units
24 elective course units of non-computing 1 24 Units

Total: 120 Units

Note(s)

1 Students are encouraged to choose 12 course units of administration, humanities, science or social science courses that relate to the data science domain.