

2015-2016 Course Sequence
Major in Computer Science

1st YEAR (30 credits)

		<u>Session</u>	<u>Prerequisite(s)</u>
ITI1120	Introduction to Computing I	Fall	
MAT1320	Calculus I	Fall	One of MAT1339, Ontario 4U Calculus and Vectors (MCV4U) or an equivalent
or			
MAT1330	Calculus for the Life Sciences I	Fall	One of MAT1339, Ontario 4U Calculus and Vectors (MCV4U) or an equivalent
MAT1341	Introduction to Linear Algebra	Fall	MAT1339 or Ontario 4U Calculus and Vectors (MCV4U), or an equivalent
Opt 1/ Opt 2 *		Fall	
Opt 1/ Opt 2 *		Fall	
ITI1100	Digital Systems I	Winter	
ITI1121	Introduction to Computing II	Winter	ITI1120
MAT1348	Discrete Mathematics for Computing	Winter	
MAT1322	Calculus II	Winter	MAT1320
or			
MAT1332	Calculus for the Life Sciences II	Winter	MAT1330
Opt 1/ Opt 2 *		Winter	

* Opt 1: Minor from another Faculty + 30 credits electives
 Opt 2: Second major from another Faculty

2nd YEAR (30 credits)

		<u>Session</u>	<u>Prerequisite(s)</u>
CSI2110	Data Structures and Algorithms	Fall	ITI1121, MAT1348
SEG2105	Introduction to Software Engineering	Fall	ITI1121
Opt 1/ Opt 2 *		Fall	
Opt 1/ Opt 2 *		Fall	
Opt 1/ Opt 2 *		Fall	
CSI2101	Discrete Structures	Winter	MAT1348
CSI2120	Programming Paradigms	Winter	CSI2110
CSI2132	Databases I	Winter	CSI2110
CSI2911	Professional Practice in Computing	Winter	
MAT2377	Probability and Statistics for Engineers	Winter	MAT1320 or MAT1330; corequisite: MAT1322 or MAT1325 or MAT1332

* Opt 1: Minor from another Faculty + 30 credits electives
 Opt 2: Second major from another Faculty

3rd YEAR (30 credits)

		<u>Session</u>	<u>Prerequisite(s)</u>
CSI3105	Design and Analysis of Algorithms I	Fall	CSI2110, CSI2101 or for honors mathematics students: CSI2110, (MAT2141 or MAT2143)
Elective ¹		Fall	
Elective ²		Fall	
Opt 1/ Opt 2 *		Fall	
Opt 1/ Opt 2 *		Fall	
Elective ¹		Winter	
Elective ²		Winter	
Opt 1/ Opt 2 *		Winter	
Opt 1/ Opt 2 *		Winter	
Opt 1/ Opt 2 *		Winter	

* Opt 1: Minor from another Faculty + 30 credits electives
 * Opt 2: Second major from another Faculty

¹ 6 credits from {CSI3120, CSI3130, CSI3131, CSI3140}

² 9 credits from {CEG/CSI/SEG (3000 or over)}

4th YEAR (30 credits)

Session

Prerequisite(s)

Elective ²	Fall
Opt 1/ Opt 2 *	Fall
Opt 1/ Opt 2 *	Fall
Opt 1/ Opt 2 *	Fall
Opt 1/ Opt 2 *	Fall
Opt 1/ Opt 2 *	Winter
Opt 1/ Opt 2 *	Winter
Opt 1/ Opt 2 *	Winter
Opt 1/ Opt 2 *	Winter
Opt 1/ Opt 2 *	Winter

- * Opt 1: Minor from another Faculty + 30 credits electives
Opt 2: Second major from another Faculty

² 9 credits from {CEG/CSI/SEG (3000 or over)}

For the *Extended French Stream* program, in addition to the above you will also have to fulfill the following requirements:

- The student must be admitted as an Anglophone in the program; the Admissions officers will ensure that the student is coming from an English high school and the student must pass a French proficiency test.
- The student must complete at least 42 credits in courses whose language of instruction is French. Note that bilingual courses such as research courses, do not count. However if the capstone project is solely completed in French, these credits can be applied against the 42 credits.
- A minimum of 6 credits (within the maximum of 42 credits) must be done in approved, non-technical courses such as Complementary studies courses or electives in the Humanities; it may also include courses within the Faculty of Engineering related to professional development, management and communication.
- 12 credits (within the minimum number of 42 credits) must be done in required first year courses, another 12 credits must be done in required second year courses within the program of study, and another 12 credits must be done in required third year courses within the program of study.
- Students must pass FLS3500. This test ensures that the immersion graduates are indeed fluently bilingual.