Course Sequence
Honours with Specialization in Computer Science, Management and Entrepreneurship Option

# 1st YEAR (30 credits)

| | | Session | Prerequisite |
|---|---|---|---|
| ADM1100 | Introduction to Business Management | Fall | |
| ITI1120 | Introduction to computing I | Fall | |
| MAT1320 | Calculus 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. |
| Elective [1] | | Fall | |
| ITI1100 | Digital systems I | Winter | |
| ITI1121 | Introduction to computing II | Winter | ITI1120 |
| MAT1322 | Calculus II | Winter | MAT1320 |
| MAT1348 | Discrete Mathematics for Computing | Winter | |
| Free elective | | Winter | |

[1] 12 credits of non-computing, non-mathematics electives. It is recommended to choose humanities and social sciences courses.

# 2nd YEAR (30 credits)

| | | Session | Prerequisite |
|---|---|---|---|
| CEG2136 | Computer architecture I | Fall | ITI1100 |
| CSI2110 | Data Structures and Algorithms | Fall | ITI1121, MAT1348 |
| ENG1112 | Technical Report Writing | Fall | |
| SEG2105 | Introduction to Software Engineering | Fall | ITI1121 |
| Free elective | | Fall | |
| ADM2320 | Marketing | Winter | ADM1100 or ADM1300 |
| CSI2101 | Discrete Structures | Winter | MAT1348 |
| CSI2120 | Programming Paradigms | Winter | CSI2110 |
| CSI2132 | Databases I | Winter | CSI2110 |
| CSI2911 | Professional Practice in Computing | Winter | |

# 3rd YEAR (30 credits)

| | | Session | Prerequisite |
|---|---|---|---|
| ADM1340 | Financial Accounting | Fall | ADM1100 or ADM1300. Previously ADM2340 |
| CSI3105 | Design and Analysis of Algorithms I | Fall | CSI2110, CSI2101 or for honors mathematics students: CSI2110, (MAT2141 or MAT2143) |
| CSI3120 | Programming Language Concepts | Fall | CSI2101, CSI2120 |
| Elective [1] | | Fall | |
| Free elective | | Fall | |
| ADM3313 | Entrepreneurial Mind: New Venture Creation | Fall | ADM1100 or ADM1300 |
| CSI3104 | Introduction to Formal Languages | Winter | CSI2101 or MAT2143 |
| CSI3131 | Operating systems | Winter | CEG2136, CSI2110 |
| MAT2377 | Probability and Statistics for Engineers | Winter | MAT1320 or MAT1330; corequisite: MAT1322 or MAT1325 or MAT1332 |
| Free elective | | Winter | |

[1] 12 credits of non-computing, non-mathematics electives. It is recommended to choose humanities and social sciences courses.

# 4<sup>th</sup> YEAR (30 credits)

| | | Session | Prerequisite |
|---|---|---|---|
| Elective (CSI 4000) | | Fall | |
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| Elective (CEG, ELG, SEG 3000) | | Fall | |
| or | | | |
| CSI2372 | Advanced Programming Concepts with C++ | Fall | ITI1121, ITI1100 |
| Elective [1] | | Fall | |
| Free elective | | Fall | |
| CSI4900 | Honours Project | Winter | 18 credits from CSI or SEG 3000 level |
| Elective [1] | | Winter | |
| Elective (CSI 4000) | | Winter | |
| Elective [2] | | Winter | |
| Free elective | | Winter | |

[1] 12 credits of non-computing, non-mathematics electives. It is recommended to choose humanities and social sciences courses.
[2] 3 credits from: ADM1101, ADM2336, ADM3318, ADM3319, ADM3326, GNG4120, GNG4170 and PHI2397.

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.