HONOURS BSC IN 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 2015-2016 calendars (http://www.uottawa.ca/academic/info regist/1516/calendars/) for the previous requirements.


<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ENG 1112</td>
<td>Technical Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>ITI 1100</td>
<td>Digital Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ITI 1120</td>
<td>Introduction to Computing I</td>
<td>3</td>
</tr>
<tr>
<td>ITI 1121</td>
<td>Introduction to Computing II</td>
<td>3</td>
</tr>
<tr>
<td>MAT 1320</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 1322</td>
<td>Calculus II</td>
<td>3</td>
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<tr>
<td>MAT 1341</td>
<td>Introduction to Linear Algebra</td>
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<tr>
<td>MAT 1348</td>
<td>Discrete Mathematics for Computing</td>
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<tr>
<td>CEG 2136</td>
<td>Computer Architecture I</td>
<td>3</td>
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<tr>
<td>CSI 2101</td>
<td>Discrete Structures</td>
<td>3</td>
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<tr>
<td>CSI 2110</td>
<td>Data Structures and Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>CSI 2120</td>
<td>Programming Paradigms</td>
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</tr>
<tr>
<td>CSI 2132</td>
<td>Databases I</td>
<td>3</td>
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<tr>
<td>CSI 2911</td>
<td>Professional Practice in Computing</td>
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<tr>
<td>MAT 2377</td>
<td>Probability and Statistics for Engineers</td>
<td>3</td>
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<tr>
<td>SEG 2105</td>
<td>Introduction to Software Engineering</td>
<td>3</td>
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<tr>
<td>CSI 3104</td>
<td>Introduction to Formal Languages</td>
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<tr>
<td>CSI 3105</td>
<td>Design and Analysis of Algorithms I</td>
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<tr>
<td>CSI 3120</td>
<td>Programming Language Concepts</td>
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<tr>
<td>CSI 3131</td>
<td>Operating Systems</td>
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<td>CSI 4900</td>
<td>Honours Project</td>
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3 course units from:

<table>
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<th>Course Code</th>
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<tbody>
<tr>
<td>CSI 2372</td>
<td>Advanced Programming Concepts With C++</td>
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</table>

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

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<tbody>
<tr>
<td>ENG 1112</td>
<td>Technical Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>ADM 1100</td>
<td>Introduction to Business Management</td>
<td>3</td>
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<tr>
<td>ADM 1340</td>
<td>Financial Accounting</td>
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<td>ADM 2320</td>
<td>Marketing</td>
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<tr>
<td>ADM 3313</td>
<td>New Venture Creation</td>
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<tr>
<td>3 course units from the list of optional courses in Engineering Management and Entrepreneurship option</td>
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<tr>
<td>12 elective course units of non-computing, non-mathematics courses</td>
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Note(s)
1 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:

<table>
<thead>
<tr>
<th>Course Code</th>
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</thead>
<tbody>
<tr>
<td>ADM 1101</td>
<td>Social Context of Business</td>
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<tr>
<td>ADM 2336</td>
<td>Organizational Behaviour</td>
<td>3</td>
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<tr>
<td>ADM 3318</td>
<td>International Business</td>
<td>3</td>
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<tr>
<td>ADM 3319</td>
<td>Cross-Cultural Management</td>
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<tr>
<td>ADM 3326</td>
<td>Advertising and Sales Promotion</td>
<td>3</td>
</tr>
<tr>
<td>GNG 4120</td>
<td>Technology Entrepreneurship for Engineers and Computer Scientists</td>
<td>3</td>
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<tr>
<td>GNG 4170</td>
<td>Engineering Law</td>
<td>3</td>
</tr>
<tr>
<td>PHI 2397</td>
<td>Business Ethics</td>
<td>3</td>
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