**BASC IN MECHANICAL ENGINEERING AND BSC IN COMPUTING TECHNOLOGY**

If it moves, a mechanical engineer designed it! Mechanical engineers are responsible for a wide range of mechanical, thermal and biomedical systems and devices, from computer parts to power plants, from manufacturing systems to spacecraft. This is a broad-based area of engineering, and graduates find work in almost every industrial sector, including high tech, aerospace, manufacturing, auto, energy, biomedical and consulting.

This program is offered in English and in French.

French courses are available in first year and almost all of second year. Most third and fourth year courses are offered in English only.

**Program Requirements**

Upon completion of a Bachelor of Applied Science in Mechanical engineering, a student who completes the requirements specified below for 30 extra units will be eligible for a BSc in Computing Technology, as a second degree. The remaining 132 units are from their engineering degree; students follow the engineering degree requirements and the computing technology degree requirements in parallel. It is not allowed to obtain the computing technology degree without also completing the corresponding engineering degree.

Co-operative education is available with this program.

### BASc in Mechanical Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEG 2136</td>
<td>Computer Architecture I</td>
<td>3</td>
</tr>
<tr>
<td>CEG 3136</td>
<td>Computer Architecture II</td>
<td>3</td>
</tr>
<tr>
<td>CSI 2110</td>
<td>Data Structures and Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>CSI 2120</td>
<td>Programming Paradigms</td>
<td>3</td>
</tr>
<tr>
<td>CSI 2372</td>
<td>Advanced Programming Concepts With C++</td>
<td>3</td>
</tr>
<tr>
<td>CSI 3131</td>
<td>Operating Systems</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 1348</td>
<td>Discrete Mathematics for Computing</td>
<td>3</td>
</tr>
</tbody>
</table>

3 course units in computer science (CSI), software engineering (SEG) or computer engineering (CEG) at the 2000, 3000 or 4000 level

**Total:** 162 Units

**Note(s)**

2. This course replaces GNG 1106 in the BASc in Mechanical Engineering, for the purpose of the double degree, BASc in Mechanical Engineering and BSc in Computing Technology.