COMPLEMENTARY STUDIES

Complementary studies include humanities, social sciences, arts, management, engineering economics and communications that complement the technical content of the curriculum. While considerable latitude is provided in the choice of suitable content for the complementary studies component of the curriculum, some areas of study are essential in the education of an engineer. Accordingly, the curriculum must include studies in the following:

1. Subject matter that deals with the humanities and social sciences
2. Oral and written communications
3. Professionalism, ethics, equity and law
4. The impact of engineering on society
5. Health and safety
6. Sustainable development and environmental stewardship
7. Engineering economics and project management

Language instruction may be included within complementary studies provided it is not taken to fulfill an admission requirement.

In all academic plans in the Faculty students must complete courses in Complementary Studies amounting to at least 18.75 credits (corresponding to 225 AUs, which is the minimum CEAB requirement). Some of these credits are obtained in faculty-wide core courses, while others may be drawn from a list of elective courses. All of the academic plans in the Faculty have courses in Complementary Studies built into the CORE of the curriculum, and/or have portions of technical courses assigned to topics in Complementary Studies. The exact requirements vary from plan to plan, the details are provided in the curriculum for each Academic Plan.

The table below shows the credits available in the core courses (minimum number of total credits available: 11.17, see Table 1). The rest of the units must be drawn from Lists A and B of elective courses to fulfill the 18.75 credit requirement. Students must thus take a minimum of 3 credits in Humanities and Social Sciences from List A, and an additional 6 credits from List A or B.

The lists are updated each year, and a course qualifies as a Complementary Studies course only if it appears on the list for the Academic Session in which the course is taken.

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**Table 1: Complementary Studies Content in Smith Engineering Programs**

<table>
<thead>
<tr>
<th>Area of Complementary Courses Study</th>
<th>Core APSC Courses</th>
<th>Credits in Core APSC Courses</th>
<th>Minimum Credits in Various Academic Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities and Social Science (H&amp;SS)</td>
<td>N/A</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Engineering Economics</td>
<td>APSC 221&lt;sup&gt;2&lt;/sup&gt;</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Communications</td>
<td>APSC 100, APSC 293, APSC 200, APSC 151, APSC 199</td>
<td>6.67</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**Total 11.17 Credits**

1. At the end of each Academic Plan listing in the Calendar there is an explanation of which courses may be taken to meet the requirement for engineering economics.
2. At the end of each Academic Plan listing in the Calendar there is an explanation of which additional courses must be taken to meet the total credit requirement for Communications.

**Important**: Note it is always the student’s responsibility to check that they have the total required number of units.

**These Complementary Studies requirements are effective starting the 2020-2021 academic year. For previous years' requirements, please refer to the respective calendar.**

**List A and B**

Students must take a minimum of 3 credits in Humanities and Social Sciences from List A, and an additional 6 credits from List A or B.

Courses in LIST A introduce students to subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences.

**Note**: A course will be accepted as a Humanities and Social Sciences (H&SS) credit only if it appears on the list of
approved H&SS courses for the Academic Session in which the course is taken.

Complementary Studies List A (https://queensu-ca-public.courseleaf.com/engineering-applied-sciences/complementary-studies/list/)
Complementary Studies List B (https://queensu-ca-public.courseleaf.com/engineering-applied-sciences/complementary-studies/listb/)