The extended French stream is available with this program.

In addition to classroom teaching, programs offer practical laboratory training with a focus on individual instruction.

This program is offered in English and in French.

**Program Requirements**

Co-operative education is available with this program.

Requirements for this program have been modified. Please consult the 2018-2019 calendars (https://catalogue.uottawa.ca/en/archives) for the previous requirements.

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<td>MAT 1320</td>
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<td>CHM 2128</td>
<td>Synthesis and Characterization of Advanced Materials</td>
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<td>Chemical Thermodynamics of Gases and Solutions</td>
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<td>Physical Chemistry: Introduction to the Molecular Properties of Matter</td>
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<td>CHM 3140</td>
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<td>Nanostructured Materials</td>
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<td>CHM 4354</td>
<td>Principles of Instrumental Analysis</td>
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<td>CHM 4380</td>
<td>Advanced Characterization Methods in Material Science and Catalysis</td>
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<td>CHM 4155</td>
<td>Polymer and Applied Chemistry</td>
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<td>CHM 4182</td>
<td>Molecular Dynamics in Chemistry</td>
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<tr>
<td>CHM 4311</td>
<td>Selected Topics in Inorganic Chemistry</td>
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<tr>
<td>CHM 4313</td>
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<td>Organometallic Chemistry</td>
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<td>CHM 4325</td>
<td>Advanced Organic Synthesis and Reaction Mechanisms</td>
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<tr>
<td>CHM 4340</td>
<td>Application of Theoretical Chemistry</td>
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<tr>
<td>CHM 4381</td>
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**Note(s)**

1. A project related to Advances Materials is strongly recommended.
2. Although the program is well suited for future graduate work, for students intending to pursue graduate studies in chemistry, it is highly recommended to take 6 of their elective course units from the list of chemistry (CHM) courses in their area of interest at the 4000 level.

**List of Optional Courses**

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<td>CHM 4123</td>
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<td>CHM 4141</td>
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<td>CHM 4143</td>
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<td>CHM 4155</td>
<td>Polymer and Applied Chemistry</td>
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<td>CHM 4182</td>
<td>Molecular Dynamics in Chemistry</td>
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<td>CHM 4311</td>
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<td>PHY 2323</td>
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<tr>
<td>PHY 4387</td>
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1 No more than 3 course units from PHY 2100, PHY 2323.