This 4-year academic plan is for freshmen entering Queens College in Fall 2021. Our 4-year academic plans are illustrative examples of integrated degree requirements and course sequencing for each of the College’s programs of study which are designed to ensure degree completion in a timely manner. Students are advised to meet with professional and faculty advisors to tailor their degree maps to their individual interests (academic and career goals), as well as other considerations including course offerings and the incorporation of winter and summer sessions. Course pre-requisite/s and co-requisite/s are strictly enforced, as are entrance and maintenance criteria (if applicable) for the successful completion of the degree.
# QUEENS COLLEGE
## Applied Mathematics BA
### Biology/Chemistry Track
#### FOUR YEAR ACADEMIC PLAN

## Freshman
### FALL
- English Composition I (EC1) 3 credits
- MATH 122 (MQR) 4 credits
- Pre-calculus
- CHEM 1134&1131 (LPS) 5 credits
- General Chemistry I
- World Cultures & Global Issues (WCGI) 3 credits

**Fall total credits** 15 credits

### SPRING
- English Composition II (EC2) 3 credits
- MATH 151¥ (or equivalent) 4 credits
- Calculus I
- CHEM 1144&1141 (SW) 5 credits
- General Chemistry II
- US Experience in its diversity (USED) 3 credits

**Spring total credits** 15 credits

## Sophomore
### FALL
- MATH 152¥ (or equivalent) 4 credits
- Calculus II
- BIOL 105 (SW) 4 credits
- General Biology I
- MATH 241 3 credits
- Probability & Statistics
- Creative expression (CE) 3 credits
- General electives 1 credit

**Fall total credits** 15 credits

### SPRING
- MATH 201 4 credits
- Multi-Variable Calculus
- BIOL 106 (SCI) 4 credits
- General Biology II
- CSCI 111 (or MATH 250) 3 credits
- Intro to Algorithmic Problem Solving
- Individual and Society (IS) 3 credits
- General electives 1 credit

**Spring total credits** 15 credits

General Education requirements may be taken in any order if the pre-requisite requirement(s) is/are satisfied.

¥The following sequences of classes are considered the equivalents of MATH 151 and MATH 152: MATH 141, 142, and 143; MATH 131, 132, and 143; MATH 151, 142, and 143, MATH 157 and 158.
## Applied Mathematics BA
### Biology/Chemistry Track

### FOUR YEAR ACADEMIC PLAN

#### Junior

<table>
<thead>
<tr>
<th>FALL</th>
<th>SPRING</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 202 (or 207)</td>
<td>Math Elective®&lt;sup&gt;®&lt;/sup&gt; (in consultation with Math Dept. advisor)</td>
</tr>
<tr>
<td>Advanced Calculus</td>
<td>Math Elective®&lt;sup&gt;®&lt;/sup&gt; (in consultation with Math Dept. advisor)</td>
</tr>
<tr>
<td>MATH 231</td>
<td>One Writing Intensive Unit (W)</td>
</tr>
<tr>
<td>Linear Algebra</td>
<td>An Additional College Core</td>
</tr>
<tr>
<td>College Option Literature (LIT+W)</td>
<td>Second major, minor, or general electives</td>
</tr>
<tr>
<td>With Writing Intensive Unit&lt;sup&gt;*&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Foreign Language (LANG)</td>
<td>3 credits</td>
</tr>
<tr>
<td>Fall total credits</td>
<td>15 credits</td>
</tr>
<tr>
<td>Spring total credits</td>
<td>15 credits</td>
</tr>
</tbody>
</table>

#### Senior

<table>
<thead>
<tr>
<th>FALL</th>
<th>SPRING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math Elective®&lt;sup&gt;®&lt;/sup&gt; (in consultation with Math Dept. advisor)</td>
<td>Math Elective®&lt;sup&gt;®&lt;/sup&gt; (in consultation with Math Dept. advisor)</td>
</tr>
<tr>
<td>Math Elective®&lt;sup&gt;®&lt;/sup&gt; (in consultation with Math Dept. advisor)</td>
<td>Math Elective®&lt;sup&gt;®&lt;/sup&gt; (in consultation with Math Dept. advisor)</td>
</tr>
<tr>
<td>Second major, minor, or general electives</td>
<td>Second major, minor, or general electives</td>
</tr>
<tr>
<td>Fall total credits</td>
<td>15 credits</td>
</tr>
<tr>
<td>Spring total credits</td>
<td>15 credits</td>
</tr>
</tbody>
</table>

* At least eighteen credits of the MATH required and elective courses must be taken at Queens College.

**General Electives: Students may complete general electives by taking courses in (most) department/s or programs they choose; however, depending on the course/program, students may need department permission and/or prerequisite courses. Electives may be used to supplement the chosen major (an English major may want to take a course in French or Italian literature) or to fulfill interest in a different area (a Music major may be interested in the physics of sound). Students are encouraged to use available electives to complete a dual major, minor, pre-requisites for graduate or professional school, or complete and internship, experiential learning and/or study abroad. Students are encouraged to use their available general electives wisely and focus on coursework that will assist them personally, academically and professionally.

© Six elective MATH courses at the 200-, 300-, 600-, or 700-level (not including MATH 271, 272, or 385).