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.
### Freshman

<table>
<thead>
<tr>
<th>FALL</th>
<th>SPRING</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition I (EC1)</td>
<td>English Composition II (EC2)</td>
</tr>
<tr>
<td>3 credit</td>
<td>3 credit</td>
</tr>
<tr>
<td>MATH 151 (MQR)</td>
<td>PHYS 1454 &amp; 1451 (LPS)</td>
</tr>
<tr>
<td>4 credit</td>
<td>5 credit</td>
</tr>
<tr>
<td>Calculus I</td>
<td>Principles of Physics I</td>
</tr>
<tr>
<td>World Cultures &amp; Global Issues (WCGI)</td>
<td>MATH 152</td>
</tr>
<tr>
<td>3 credit</td>
<td>4 credit</td>
</tr>
<tr>
<td>U.S Experience in its Diversity (USED)</td>
<td>Calculus II</td>
</tr>
<tr>
<td>3 credit</td>
<td>Individual and Society (IS)</td>
</tr>
<tr>
<td>Creative Expression (CE)</td>
<td>3 credit</td>
</tr>
<tr>
<td>3 credit</td>
<td></td>
</tr>
<tr>
<td><strong>Fall total credits</strong></td>
<td><strong>Spring total credits</strong></td>
</tr>
<tr>
<td><strong>16 credits</strong></td>
<td><strong>15 credits</strong></td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>FALL</th>
<th>SPRING</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1464 &amp; 1461 (SCI)</td>
<td>PHYS 234</td>
</tr>
<tr>
<td>5 credit</td>
<td>3 credit</td>
</tr>
<tr>
<td>Principles of Physics II</td>
<td>Mathematical Methods II</td>
</tr>
<tr>
<td>MATH 201</td>
<td>PHYS 235</td>
</tr>
<tr>
<td>4 credit</td>
<td>2 credit</td>
</tr>
<tr>
<td>Calculus III</td>
<td>Classical Physics LAB</td>
</tr>
<tr>
<td>An Additional Flexible Core</td>
<td>Scientific World (SW)</td>
</tr>
<tr>
<td>3 credit</td>
<td>3 credit</td>
</tr>
<tr>
<td>One Writing Intensive Unit (W)</td>
<td>College Option Literature (LIT + W)</td>
</tr>
<tr>
<td>3 credit</td>
<td>3 credit</td>
</tr>
<tr>
<td><strong>Fall total credits</strong></td>
<td><strong>Spring total credits</strong></td>
</tr>
<tr>
<td><strong>15 credits</strong></td>
<td><strong>15 credits</strong></td>
</tr>
</tbody>
</table>

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

*If a Literature course is taken with a W, it will count towards Literature and one Writing Intensive Unit.*
## Junior

### FALL

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 233 Mathematical Methods I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 260 Modern Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 243 Thermodynamics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 222 Optics</td>
<td>3</td>
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</table>

**Fall total credits** 14 credits

### SPRING

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 237 Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>Science/Math Elective</td>
<td>3</td>
</tr>
<tr>
<td>An Additional College Core</td>
<td>3</td>
</tr>
<tr>
<td>General electives*</td>
<td>6</td>
</tr>
</tbody>
</table>

**Spring total credits** 16 credits

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## Senior

### FALL

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 310 Electromagnetism I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 365 Quantum Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 377 Modern Physics LAB</td>
<td>2</td>
</tr>
<tr>
<td>Physics Elective 200 or above</td>
<td>3</td>
</tr>
<tr>
<td>General electives</td>
<td>3</td>
</tr>
</tbody>
</table>

**Fall total credits** 16 credits

### SPRING

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 311 Electromagnetism II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 345 Solid State Physics</td>
<td>4</td>
</tr>
<tr>
<td>General electives</td>
<td>5</td>
</tr>
</tbody>
</table>

**Spring total credits** 13 credits

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*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 course/s. 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.