## Operations Research in Engineering
### Pre-Health Planning Guide

Please also refer to the Human Health Professionals [Guide for First- and Second-Year Pre-Med Students](#).

<table>
<thead>
<tr>
<th>Medical School Requirement</th>
<th>Possible Degree Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology (8 credits)</td>
<td>Advisor Approved Elective* (with permission of faculty advisor)</td>
</tr>
<tr>
<td>Biochemistry (3/4 credits)</td>
<td>ORIE allows courses that have CHEM 2080 as a pre-requisite as Major Approved Elective (category A). The 3000-level BIOMG courses in the Biochemistry area all meet that requirement. NS 3200 can be an Advisor-Approved Elective* (with permission of faculty advisor).</td>
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<tr>
<td>Upper-level Biology (3/4 credits)</td>
<td>Upper-level Biology and NS courses could be used as Advisor-Approved Electives (with permission of faculty advisor).</td>
</tr>
</tbody>
</table>
| General Chemistry (8 credits)     | CHEM 2090 - Engineering Common Curriculum  
CHEM 2080 or CHEM 2150 - May substitute CHEM 2080 in place of PHYS 2214 (see note below regarding PHYS 2214) or Advisor Approved Elective* (with permission of faculty advisor) |
| Organic Chemistry (8 credits)     | Organic Chemistry courses that have CHEM 2080 as a pre-requisite may be used as Major Approved Electives (category A). |
| English (writing intensive)       | Engineering Common Curriculum                                                              |
| Math                              | Calculus:  
MATH 1910 - Engineering Common Curriculum  
Statistics:  
ENGRD 2700 – Engineering Distribution Requirement |
| General Physics (8 credits)       | PHYS 1112, 2213, and 2214 - Engineering Common Curriculum  
• Students complete the 8 credits of Physics requirements by completing PHYS 1112 and PHYS 2213. Information covered in PHYS 2214 is recommended for the MCAT. If a student chooses not to take PHYS 2214, it is strongly encouraged that the student self-studies information covered in the course. PHYS 2214 could be an Advisor Approved Elective* (with permission of faculty advisor). |
| Social Science                    | Liberal Studies Requirement or Advisor Approved Elective* (with permission of faculty advisor)  
• The “Psychological, Social, and Biological Foundations of Behavior” section of the MCAT covers topics taught in social sciences. Taking courses in Sociology, Psychology, Human Development, and Developmental Sociology can prepare students. |

*Operations Research and Engineering requires two advisor approved electives.

These guides are based on the 2019-2020 degree requirements.  
For the most up to date information, consult with Engineering Advising, major departments, or the current [Engineering Undergraduate Handbook](#).

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