

## Operations Research in Engineering

### Pre-Health Planning Guide

Please refer to Cornell Career Services [Pre-Health Academic Preparation](#) website for additional course options.

Medical School Requirement	Possible Degree Application
<b>Biology (8 credits)</b>	Advisor Approved Elective* (with permission of faculty advisor)
<b>Biochemistry (3/4 credits)</b>	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 meet that requirement.  NS 3200 can be an Advisor-Approved Elective* (with permission of faculty advisor).
<b>Upper-level Biology (3/4 credits)</b>	Upper-level Biology and NS courses could be used as Advisor-Approved Electives* (with permission of faculty advisor). <ul style="list-style-type: none"> <li>• Although not required, students find that taking upper level biology courses useful in understanding advanced concepts and providing greater depth of preparation for MCAT exams</li> </ul>
<b>General Chemistry (8 credits)</b>	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)
<b>Organic Chemistry (8 credits)</b>	Organic Chemistry courses that have CHEM 2080 as a pre-requisite may be used as Major Approved Electives (category A).
<b>English (writing intensive) (6 credits)</b>	Engineering Common Curriculum (FWS)
<b>Math</b>	Calculus: MATH 1910 - Engineering Common Curriculum  Statistics: ENGRD 2700 – Engineering Distribution Requirement
<b>General Physics (8 credits)</b>	PHYS 1110, 1112, 2213 and 2214 - Engineering Common Curriculum <ul style="list-style-type: none"> <li>• Students complete the 8 credits of Physics requirements by completing PHYS 1112, and PHYS 2213 lectures and PHYS 1110 lab.</li> <li>• 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.</li> <li>• Some medical schools may require two semesters of Physics lab. If another semester of lab is necessary a student must complete PHYS 2214.</li> </ul>
<b>Social Science</b>	Liberal Studies Requirement or Advisor Approved Elective* (with permission of faculty advisor) <ul style="list-style-type: none"> <li>• 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.</li> </ul>

\*Operations Research and Engineering requires 6 credits of advisor approved electives.

These guides are based on the 2021-2022 degree requirements.  
For the most up to date information, consult with Engineering Advising, major departments, or the current [Engineering Undergraduate Handbook](#)