## Biomedical Engineering
### Pre-Health Planning Guide

Please also refer to the Human Health Professionals Guide for First- and Second-Year Pre-Med Students

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<th>Medical School Requirement</th>
<th>Possible Degree Application</th>
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| **Biology (8 credits)**             | Major Requirement - BIOMG 1350 and BME 2010  
                                         Advisor Approved Elective* - BIOC 1500                                                   |
| **Biochemistry (3/4 credits)**      | Advisor Approved Elective*                                                                    |
| **Upper-level Biology (3/4 credits)**| Major Requirement  
                                         • 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 |
| **General Chemistry (8 credits)**   | CHEM 2090 - Engineering Common Curriculum  
                                         CHEM 2080 - Advisor Approved Elective* (with permission of faculty advisor)               |
| **Organic Chemistry (8 credits)**   | CHEM 3570 - Major Requirement (Substitutes for CHEM 1570)  
                                         CHEM 3580 and CHEM 2510 - Advisor Approved Electives* (with permission of faculty advisor) |
| **English (writing intensive) (6 credits)** | Engineering Common Curriculum (FWS)                                                    |
| **Math**                            | Calculus: MATH 1910 - Engineering Common Curriculum                                           |
|                                     | Statistics: BTRY 3010, CEE 3040, or ENGRD 2700 (Engineering Distribution Requirement)         |
| **General Physics (8 credits)**     | PHYS 1110, 1112, and 2213 - Engineering Common Curriculum (students can petition PHYS 2208 to fulfill PHYS 2213)  
                                         • Students complete the 8 credits of Physics requirements by completing PHYS 1112, and PHYS 2213 lectures and PHYS 1110 lab.  
                                         • 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.  
                                         • Some medical schools may require two semesters of Physics lab. If another semester of lab is necessary a student must complete PHYS 2214. |
| **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. |

*Biomedical 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

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