

BS Bioengineering

2019/20 curriculum	Proposed 2020/21 curriculum
<b>Bioengineering B.S.</b>	<b>Bioengineering B.S.</b>
Preparation for the Major	Preparation for the Major
<p><i>Required: Bioengineering 10; Chemistry and Biochemistry 20A, 20B, 20L, 30A, 30AL, 30B; Civil and Environmental Engineering M20 or Computer Science 31 or Mechanical and Aerospace Engineering M20; Mathematics 31A, 31B, 32A, 32B, 33A, 33B; Physics 1A, 1B, 1C, 4AL.</i></p> <p><i>Students must also complete one of two life sciences sequences — either Life Sciences 2 (satisfies school GE life sciences requirement) and 3, or 7A (satisfies school GE life sciences requirement) and 7C. They may not substitute courses in either sequence.</i></p>	<p><i>Required: Bioengineering 10; Chemistry and Biochemistry 20A, 20B, 20L, 30A, 30AL, 30B; Civil and Environmental Engineering M20 or Computer Science 31 or Mechanical and Aerospace Engineering M20; Mathematics 31A, 31B, 32A, 32B, 33A, 33B; Physics 1A, 1B, 1C, 4AL.</i></p> <p><i>Students must also complete one of two life sciences sequences — either Life Sciences 2 (satisfies school GE life sciences requirement) and 3, or 7A (satisfies school GE life sciences requirement) and 7C. They may not substitute courses in either sequence.</i></p>

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The Major	The Major
<p>Students must complete the following courses:</p> <ol style="list-style-type: none"> <li>1. Bioengineering 100, 110, 120, Electrical and Computer Engineering 100, Engineering 183EW or 185EW, 167L, 176, 180; three technical breadth courses (12 units) selected from an approved list available in the <a href="#">Office of Academic and Student Affairs</a>; two capstone design courses (Bioengineering 177A, 177B)</li> <li>2. Two major field elective courses (8 units) from Bioengineering C101, C106, C131, C155, M260 (a petition is required for M260)</li> <li>3. Five additional major field elective courses (20 units) from Bioengineering C101 (unless taken under item 2), CM102, CM103, C104, C105, C106 (unless taken under item 2), C131 (unless taken under item 2), CM140, CM145, C147, M153, C155 (unless taken under item 2), C170, C171, CM178, C179, 180L, C183, C185, CM186, CM187, 199 (8 units maximum)</li> </ol> <p>Three of the major field elective courses and the three technical breadth courses may also be selected from one of the following tracks. Bioengineering majors cannot take bioengineering technical breadth courses to fulfill the technical breadth requirement.</p> <p><i>Biomaterials and Regenerative Medicine:</i> Bioengineering C104, C105, CM140, C147, C183, C185, 199 (8 units maximum), Materials Science and Engineering 104, 110, 111, 120, 130, 132, 143A, 150, 151, 160, 161. The above materials science and engineering courses may be used to satisfy the technical breadth requirement.</p> <p><i>Biomedical Devices:</i> Bioengineering C131, M153, C172, 199 (8 units maximum), Electrical and Computer Engineering 102, Mechanical and Aerospace Engineering C187L. The electrical and computer engineering or mechanical and aerospace engineering courses listed above may be used to satisfy the technical breadth requirement.</p> <p>For Bioengineering 199 to fulfill a track requirement, the research project must fit within the scope of the track field, and the research report</p>	<p>Students must complete the following courses:</p> <ol style="list-style-type: none"> <li>1. Bioengineering 100, 110, 120, <a href="#">175</a>, Electrical and Computer Engineering 100, Engineering 183EW or 185EW, 167L, 176, 180; three technical breadth courses (12 units) selected from an approved list available in the <a href="#">Office of Academic and Student Affairs</a>; two capstone design courses (Bioengineering 177A, 177B)</li> <li>2. Two major field elective courses (8 units) from Bioengineering C101, C106, C131, C155, M260 (a petition is required for M260)</li> <li>3. <del>Four</del><sup>Five</sup> additional major field elective courses (<del>16</del><sup>20</sup> units) from Bioengineering C101 (unless taken under item 2), CM102, CM103, C104, C105, C106 (unless taken under item 2), C131 (unless taken under item 2), CM140, CM145, C147, M153, C155 (unless taken under item 2), C170, C171, CM178, C179, 180L, C183, C185, CM186, CM187, 199 (8 units maximum)</li> </ol> <p>Three of the major field elective courses and the three technical breadth courses may also be selected from one of the following tracks. Bioengineering majors cannot take bioengineering technical breadth courses to fulfill the technical breadth requirement.</p> <p><i>Biomaterials and Regenerative Medicine:</i> Bioengineering C104, C105, CM140, C147, C183, C185, 199 (8 units maximum), Materials Science and Engineering 104, 110, 111, 120, 130, 132, 143A, 150, 151, 160, 161. The above materials science and engineering courses may be used to satisfy the technical breadth requirement.</p> <p><i>Biomedical Devices:</i> Bioengineering C131, M153, C172, 199 (8 units maximum), Electrical and Computer Engineering 102, Mechanical and Aerospace Engineering C187L. The electrical and computer engineering or mechanical and aerospace engineering courses listed above may be used to satisfy the technical breadth requirement.</p> <p>For Bioengineering 199 to fulfill a track requirement, the research project must fit within the scope of the track field, and the research report</p>

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<p>must be approved by the supervisor and vice chair.</p> <p>For information on UC, school, and general education requirements, see the <a href="#">College and Schools</a> chapter.</p>	<p>must be approved by the supervisor and vice chair.</p> <p>For information on UC, school, and general education requirements, see the <a href="#">College and Schools</a> chapter.</p>