# Master of Engineering in Bioengineering<br>**Track: Biomolecular Engineering**

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## Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Required</th>
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<tbody>
<tr>
<td>CPE 756</td>
<td>Intro to Bioengineering (3)</td>
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<tr>
<td>BIOE 800</td>
<td>Bioengineering Colloquium (.5) (2 total hours req)</td>
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<tr>
<td>BIOE 801</td>
<td>Responsible Conduct of Research in Engineering (1)</td>
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</tbody>
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## Depth

### 6 hours required

1. Advanced Engineering / Pharmaceuticals (1 course min)
   - CPE 701: Numerical Methods (3)
   - CPE 715: Drug Delivery (3)
   - CPE 715: Polymer Science & Technology (3)
   - CPE 731: Transport Phenomenon (3)
   - CPE 732: Advanced Transport Phenomena (3)
   - CPE 751: Basic Rheology (3)
   - ME 767: Molecular Biomimetics (3)
   - ME 790: Biomedical Microdevices (3)
   - PHCH 730/731: Biopharmaceuticals & Pharmacokinetics (3)
   - PHCH 862/863: Pharmaceutical Equilibrium (3)
   - PHCH 870: Advanced Pharmaceutical Biotechnology (4)

2. Advanced Biological Sciences
   - PHCH 860: Principles & Practice of Chemical Biology (3)
   - CHEM 760: Intro to Chemistry in Biology (3)
   - MDCM 701: Biomedical Chemistry (3)
   - ANAT 845 / BIOL 560: Histology (3)
   - MICR 808 / BIOL 503: Immunology (3)
   - MICR 825 / BIOL 512: Virology (3)
   - BIOL 752: Cell Biology (3)

## Breadth

### 18 hours minimum

Choose appropriate courses with advisor from master list in the following categories:

1. Statistics (1 course min)
2. Sciences (1 course min)
3. Advanced Engineering (1 course min)

**Minimum Hours Required for Degree: 30**

No more than 3 classes may be taken at the 500-600 level and counted towards the graduate degree.