BIOENGINEERING GRADUATE MAJOR (MENG, MS, PHD)

Graduate Areas of Concentration

Biomaterials, biomedical devices and instrumentation, human performance engineering, medical imaging, systems and computation biology

Students enrolled in the MEng and MS degree programs will complete at least 45 graduate credits. For students in the MS program, 12 of those credits must be thesis credits (BIOE 503 Thesis). Students enrolled in the PhD program will complete at least 108 graduate credits. At least 36 of those credits must be non-blanket course work, and at least 36 must be thesis credits (BIOE 603 Thesis).

Students in all Bioengineering graduate programs (MEng, MS and PhD) will be required to complete the program core curriculum for a total of 15 credits. The remaining credits required for completion of the degree program will be electives, and may include courses in science, mathematics, engineering or other topics (e.g., entrepreneurship). An abundance of courses are currently offered at OSU that could fulfill the elective requirements, including several courses related to bioengineering offered within the College of Engineering. In addition, the College of Veterinary Medicine’s graduate program in Comparative Health Sciences includes various course offerings that can serve as electives for Bioengineering graduate students. These include courses in Animal Models (VMB 521 ANIMAL MODELS) and Molecular Tools (VMB 671 MOLECULAR TOOLS), as well as courses in bioinformatics, epidemiology, genomics and immunology.

All students submit a program of study during their first quarter in the program specifying the elective courses they plan to take to complete their degree requirements. Programs of study will be reviewed by a committee of BIOE program faculty to ensure that the program has sufficient breadth and depth in the context of the student’s planned research activities.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Core</td>
<td></td>
<td></td>
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<tr>
<td>BIOE 507</td>
<td>SEMINAR (1 credit/term, 3 credits required)</td>
<td>3</td>
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<tr>
<td>BIOE 5XX. Physiology for Engineers (course under development)</td>
<td>4</td>
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<tr>
<td>BIOE 5XX. Cellular and Molecular Bioengineering (course under development)</td>
<td>3</td>
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<tr>
<td>BIOE 5XX. Bioengineering Analysis (course under development)</td>
<td>3</td>
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<tr>
<td>BIOE 5XX. Drug and Medical Device Regulations in Technology Development (course under development)</td>
<td>2</td>
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<tr>
<td>Electives</td>
<td>The number of credits depends on the degree type</td>
<td></td>
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<tr>
<td>Total Hours</td>
<td>15</td>
<td></td>
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