BIOMECHANICS GRADUATE CONCENTRATION

For the graduate concentration in Biomechanics

department head: Mark Anastasio (maa@illinois.edu)
director of graduate studies: Wawrzyniec Dobrucki (dobrauki@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply
(department website: https://bioengineering.illinois.edu/)
program website: https://bioengineering.illinois.edu/academics/graduate/phd/concentrations.html
department faculty: https://bioengineering.illinois.edu/directory/
college website: https://grainger.illinois.edu/
contact: Liezl Bowman (liezlb@illinois.edu)
address: 1240 Everitt Laboratory, 1406 W Green St, Urbana, IL 61801
phone: (217) 333-1867
e-mail: bioe-gradprograms@illinois.edu (bioengineering@illinois.edu)

The Biomechanics Concentration prepares students for collaborative research across the disciplines of engineering, biology, and the sciences. Students must be enrolled in a graduate degree program:

- Bioengineering, MS (http://catalog.illinois.edu/graduate/engineering/bioengineering-ms/)
- Bioengineering, PhD (http://catalog.illinois.edu/graduate/engineering/bioengineering-phd/)
- Bioinformatics: Bioengineering, MS (http://catalog.illinois.edu/graduate/engineering/concentration/bioengineering/bioinformatics/)
- Electrical & Computer Engineering, MS (http://catalog.illinois.edu/graduate/engineering/electrical-computer-engineering-ms/)
- Electrical & Computer Engineering, PhD (http://catalog.illinois.edu/graduate/engineering/electrical-computer-engineering-phd/)
- Materials Engineering, MEng (http://catalog.illinois.edu/graduate/engineering/materials-engineering-meng/)
- Materials Science & Engineering, MS (http://catalog.illinois.edu/graduate/engineering/materials-science-engineering-ms/)
- Materials Science & Engineering, PhD (http://catalog.illinois.edu/graduate/engineering/materials-science-engineering-phd/)
- Mechanical Engineering, MS (http://catalog.illinois.edu/graduate/engineering/mechanical-engineering-ms/)
- Mechanical Engineering, MEng (http://catalog.illinois.edu/graduate/engineering/mechanical-engineering-meng/)
- Theoretical & Applied Mechanics, MS (http://catalog.illinois.edu/graduate/engineering/theoretical-applied-mechanics-ms/)
- Theoretical & Applied Mechanics, PhD (http://catalog.illinois.edu/graduate/engineering/theoretical-applied-mechanics-phd/)

Other Graduate Programs in the Department of Bioengineering

degrees:

- Bioengineering, MEng (http://catalog.illinois.edu/graduate/engineering/bioengineering-meng/)

concentrations:

- Bioinstrumentation (http://catalog.illinois.edu/graduate/engineering/bioengineering-meng/bioinstrumentation/)
- Computational Genomics (http://catalog.illinois.edu/graduate/engineering/bioengineering-meng/computational-genomics/)
- General Bioengineering (http://catalog.illinois.edu/graduate/engineering/bioengineering-meng/general-bioengineering/)
- Bioengineering, MS (http://catalog.illinois.edu/graduate/engineering/bioengineering-ms/)

optional concentrations:

- Biomechanics (p. 1)
- Cancer Nanotechnology (http://catalog.illinois.edu/graduate/engineering/concentration/cancer-nanotechnology/)
- Bioengineering, PhD (http://catalog.illinois.edu/graduate/engineering/bioengineering-phd/)

optional concentrations:

- Biomechanics (p. 1)
- Cancer Nanotechnology (http://catalog.illinois.edu/graduate/engineering/concentration/cancer-nanotechnology/)
- Computational Science and Engineering (http://catalog.illinois.edu/graduate/engineering/concentration/computational-science-engineering/)

concentrations:
For the Biomechanics Graduate Concentration

The Biomechanics Concentration requires students to earn a B or better in each concentration course and complete at least 12 hours. Fulfillment of these requirements will be monitored jointly by the graduate coordinators in Bioengineering and in Mechanical Science and Engineering.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current course options include:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABE 446</td>
<td>Biological Nanoengineering</td>
<td></td>
</tr>
<tr>
<td>BIOE 482</td>
<td>Musculoskel Tissue Mechanics</td>
<td></td>
</tr>
<tr>
<td>ME 483</td>
<td>Mechatnobiology</td>
<td></td>
</tr>
<tr>
<td>MSE 474</td>
<td>Biomaterials and Nanomedicine</td>
<td></td>
</tr>
<tr>
<td>PHYS 550</td>
<td>Biomolecular Physics</td>
<td></td>
</tr>
<tr>
<td>TAM 461</td>
<td>Cellular Biomechanics</td>
<td></td>
</tr>
</tbody>
</table>

Alternate courses may be applicable to the Biomechanics Concentration pending joint approval by the Bioengineering and Mechanical Science and Engineering Graduate Programs.

Total hours required for the concentration: 12

Information listed in this catalog is current as of 06/2022