Financial support

• $32,000 per year plus tuition waiver

• $2,000 signing bonus (available this fall)

• Department guarantees 5 years of funding if student maintains satisfactory progress

• Eligible for state health insurance ($48/month + $3/month for dental)
Departmental Mission

The Department of Biomedical Engineering motivates and prepares students to engage in life-long learning.

Through the creation, integration, application, and transfer of engineering knowledge to medicine and biology, we have a significant and far-reaching impact on human health.

We cultivate an environment that nurtures and promotes the development of our faculty, staff, trainees, and students as professionals and leaders.

Research Excellence

• BME - #6 in federal grant funding
• UW-Madison - #8 in research expenditures
• >250 publications per year
• >250 US patents
Diversity, Equity, and Inclusion

We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community.

Curriculum - PhD Academic Tracks

• BME 701 – Seminar (twice)
• BME 703 – Responsible Conduct of Research
• BME 704 – Professional Development
• Coursework from Academic Track
  • Biology
  • Mathematics and/or Data Science
  • Engineering

• Students with a MS may be eligible to waive some requirements
Curriculum - PhD Academic Tracks

- Biomedical Imaging and Optics
- Biomechanics
- Medical and Microdevices
- Neuroengineering
- Systems and Synthetic Biology
- Tissue Engineering and Biomaterials

Timeline

<table>
<thead>
<tr>
<th>Year 1: Semester 1</th>
<th>Program Milestones</th>
<th>Coursework Milestones</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Identify Faculty Advisor</td>
<td>BME 703: Responsible Conduct in Research</td>
</tr>
<tr>
<td>Year 1: Semester 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2: Semester 3</td>
<td>Qualifying Exam: Depth</td>
<td>BME 602: Professional Development</td>
</tr>
<tr>
<td>Year 2: Semester 4</td>
<td>Qualifying Exam: Breadth</td>
<td>Coursework complete including PhD minor; MS degree filing</td>
</tr>
<tr>
<td>Year 3: Semester 5</td>
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<td></td>
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<tr>
<td>Year 3: Semester 6</td>
<td>Preliminary Exam</td>
<td></td>
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<tr>
<td>Year 4: Semester 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 4: Semester 8</td>
<td>Annual committee review</td>
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<tr>
<td>Year 5: Semester 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 5+: Semester 10+</td>
<td>Annual committee review until thesis defense</td>
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<tr>
<td>Semester of defense</td>
<td>Schedule exit interview</td>
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</tbody>
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Rotations

• Orientation September 1
  • Faculty presentations
  • Students select 3 rotations

• Each rotation is ~3 weeks

• Students submit ranked list by Thanksgiving

• Student-advisors matched early December

• If needed, can do a 4th rotation with advisor selected by start of 2nd semester

Teaching Experience

• First year - no teaching

• Second year - BME 704 includes a teaching experience and support to develop those skills

• Third or fourth year - all BME students do a one semester teaching assistantship
Exams and Defense

• Second year – qualifying exams
  • Depth - early proposal of thesis project
  • Breadth – discussion of relevant literature

• Third year – preliminary exam
  • Written proposal with preliminary data
  • Presentation and questions

Exams and Defense

• Fourth year (+) - committee meetings
  • Updates on research progress and challenges

• Final year – thesis
  • Written document
  • Public defense
Timeline

Average Time to Graduation
5.5 years

~50% of PhD graduates go on to post-docs

~50% go directly to industry, consulting, government positions

Professional Development

- IDP
- Delta
- Internships/industry preparation
- Tech transfer/entrepreneurship
- Outreach

THE WISCONSIN IDEA IN ACTION
See nearly 1,000 recent examples of UW-Madison’s service to the state.
Wellness

• RA appointment includes sick/vacation leave
• Segregated fees support recreational facilities, intramurals, Union activities
• BME GSA – community building activities
• Let’s Talk – identity-based (including engineering-specific) groups
• University Mental Health Services – no charge

Questions?

• Ask current students on Slack channel
• Email professors directly about their research
• Email janna.pollock@wisc.edu or kreeger@wisc.edu about admissions