BIOMEDICAL ENGINEERING: ACCELERATED PROGRAM, M.S.

This is a course-based named option within the Biomedical Engineering M.S. (http://guide.wisc.edu/graduate/biomedical-engineering/biomedical-engineering-ms/#text)

The Accelerated Program named option in the Biomedical Engineering M.S. is a non-thesis program with coursework focused on engineering and science to afford further preparation and training for students interested in careers in industry or pursuing advanced academic degrees.

ADMISSIONS

Please consult the table below for key information about this degree program’s admissions requirements. The program may have more detailed admissions requirements, which can be found below the table or on the program’s website.

Graduate admissions is a two-step process between academic programs and the Graduate School. Applicants must meet the minimum requirements (https://grad.wisc.edu/apply/requirements/) of the Graduate School as well as the program(s). Once you have researched the graduate program(s) you are interested in, apply online (https://grad.wisc.edu/apply/).

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Deadline</td>
<td>December 15</td>
</tr>
<tr>
<td>Spring Deadline</td>
<td>September 1*</td>
</tr>
<tr>
<td>Summer Deadline</td>
<td>December 15</td>
</tr>
<tr>
<td>GRE (Graduate Record Examinations)</td>
<td>Not required.</td>
</tr>
<tr>
<td>English Proficiency Test</td>
<td>Every applicant whose native language is not English or whose undergraduate instruction was not in English must provide an English proficiency test score and meet the Graduate School minimum requirements (<a href="https://grad.wisc.edu/apply/requirements/#english-proficiency">https://grad.wisc.edu/apply/requirements/#english-proficiency</a>).</td>
</tr>
<tr>
<td>Other Test(s) (e.g., GMAT, MCAT)</td>
<td>n/a</td>
</tr>
<tr>
<td>Letters of Recommendation Required</td>
<td>3**</td>
</tr>
</tbody>
</table>

Complete spring applications as of September 1 are guaranteed review, but domestic applicants are welcome to apply up to November 1 and will be reviewed as space is available.

Not required for applicants with a UW–Madison Biomedical Engineering bachelor’s degree.

All applicants must satisfy requirements that are set forth by the Graduate School (https://grad.wisc.edu/). Students admitted to the program may be required to make up deficiency course requirements.

To apply to the BME program, complete applications (https://grad.wisc.edu/apply/), including supportive materials, must be submitted as described below and received by the deadline.

OFFICIAL ACADEMIC TRANSCRIPT

Electronically submit one copy of your transcript of all undergraduate and previous graduate work in your online application to the Graduate School. Unofficial copies of transcripts will be accepted for review. Official copies are required after an applicant is recommended for admission. Please do not send transcripts or any other application materials to the Graduate School or the BME department unless requested. If you have questions, please contact bmegradadmission@engr.wisc.edu.

ENGLISH PROFICIENCY TEST SCORES (IF APPLICABLE)

The TOEFL is required for international students unless a degree from a U.S. educational institution is held. Scores should be sent using institution code 1846.

An applicant whose TOEFL (iBT) score is below 92; TOEFL (PBT) score is below 580; or IELTS score is below 7 must take an English assessment test upon arrival. Depending on the result, an applicant may need to register for recommended English as a Second Language (ESL) courses in the first semester of enrollment.

THREE LETTERS OF RECOMMENDATION

These letters are required from people who can accurately judge the applicant’s academic performance. Letters of recommendation are submitted electronically to graduate programs through the online application. Applicants should not send any more than three letters (if more than three are sent, only the first three will be considered). See the Graduate School for FAQs (https://grad.wisc.edu/apply/) regarding letters of recommendation.

STATEMENT OF PURPOSE

In this document, applicants should explain why they want to pursue further education in BME. See the Graduate School for more advice on how to structure a personal statement (https://grad.wisc.edu/apply/prepare/).

RESUME

Upload your resume in your application.
APPLICATION FEE
Submission must be accompanied by the one-time application fee. It is non-refundable and can be paid by credit card (Master Card or Visa) or debit/ATM. This fee cannot be waived or deferred. Fee grants are available through the Graduate School under certain conditions.

FUNDING

GRADUATE SCHOOL RESOURCES
Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid. Further funding information (https://grad.wisc.edu/funding/) is available from the Graduate School. Be sure to check with your program for individual policies and restrictions related to funding.

PROGRAM INFORMATION
Students enrolled in this program are not eligible to receive tuition remission from graduate assistantship appointments at this institution.

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS
Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/#policiesandrequirementstext), in addition to the program requirements listed below.

NAMED OPTION REQUIREMENTS

MODE OF INSTRUCTION

Mode of Instruction Definitions
Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW-Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

Requirements | Detail |
--- | --- |
Minimum Credit Requirement | 30 credits |
Minimum Residence Credit Requirement | 16 credits |
Minimum Graduate Coursework Requirement | 15 credits must be graduate-level coursework. Details can be found in the Graduate School’s Minimum Graduate Coursework (50%) policy (https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/)). |
Overall Graduate GPA Requirement | 3.00 GPA required. This program follows the Graduate School’s policy: https://policy.wisc.edu/library/UW-1203 (https://policy.wisc.edu/library/UW-1203/). |
Other Grade Requirements | n/a |
Assessments and Examinations | There are no degree-specific assessments and examinations outside of those given in individual courses. |
Language Requirements | None. |

REQUIRED COURSES

The required coursework is designed to complement each student’s interests and background in biomedical engineering.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 semesters of B M E 701</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Bioscience credits</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Engineering credits, numbered 400 and above</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Elective credits selected in consultation with advisor</td>
<td></td>
<td>7-13</td>
</tr>
<tr>
<td>Project or Independent Study (B M E 790 or B M E 799)</td>
<td></td>
<td>0-6</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

Students choose one of the following areas of specialization. Of the credits above, 15 credits must be in one area of specialization.

Biomaterials and Tissue Engineering
Biomaterials and tissue engineering employ a diverse range of approaches to develop methods to diagnose and treat diseases, create living tissue environments that may be used to restore the function of a damaged organ, and uncover biological mechanisms related to tissue development and disease. Graduate students trained in biomaterials and tissue engineering are expected to gain a detailed understanding of cellular and molecular biology, materials science, and engineering methods.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRB 640</td>
<td>Fundamentals of Stem Cell and Regenerative Biology</td>
<td>3 or more</td>
</tr>
<tr>
<td>CRB 650</td>
<td>Molecular and Cellular Organogenesis</td>
<td></td>
</tr>
<tr>
<td>CRB/B M E 670</td>
<td>Biology of Heart Disease and Regeneration</td>
<td></td>
</tr>
</tbody>
</table>
Biomedical Engineering: Accelerated Program, M.S.

**ONCOLOGY 401**
Introduction to Experimental Oncology

**ZOOLOGY 570**
Cell Biology

**ZOOLOGY 630**

At least 12 credits of Engineering. Relevant options include:

- BM E/PHM SCI 430 Biological Interactions with Materials
- BM E 510 Introduction to Tissue Engineering
- BM E 511 Tissue Engineering Laboratory
- BM E 520 Stem Cell Bioengineering
- BM E 545 Engineering Extracellular Matrices
- BM E 550 Introduction to Biological and Medical Microsystems
- BM E 602 Special Topics in Biomedical Engineering (Advanced Stem Cell Engineering)
- BM E 630 Nanomaterials for Biomedical Applications
- CBE 540 Polymer Science and Technology
- CBE 648 Synthetic Organic Materials in Biology and Medicine
- CBE 781 Biological Engineering: Molecules, Cells & Systems
- CHEM 654 Materials Chemistry of Polymers
- M S & E 521 Advanced Polymeric Materials

**Electives (taken in consultation with your faculty advisor):**

- BM E 556 Systems Biology: Mammalian Signaling Networks
- BM E/CBE 560 Biochemical Engineering
- BM E/MED PHYS/M/PHYSICS/RADIOL 619 Microscopy of Life
- BM E 740 Biomanufacturing Entrepreneurship
- BM E/CHEM/MED PHYS 750 Biological Optical Microscopy
- BM E/CBE 782 Modeling Biological Systems
- BM E/CBE 783 Design of Biological Molecules
- BM I/STAT 541 Introduction to Biostatistics
- BM I/COMP SCI 776 Advanced Bioinformatics
- COMP SCI 765 Data Visualization
- STAT/F&W ECOL/HORT 571 Statistical Methods for Bioscience I
- STAT/B M I 877 Statistical Methods for Molecular Biology

**Biomechanics**

Biomechanics use experiments and computational tools to investigate the mechanical aspects of biological systems, at levels ranging from whole organisms to organs, tissues, and cells. Graduate students trained in biomechanics are expected to gain a detailed understanding of mechanics, mathematics, biology, and engineering.

**Biomechanics**

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Biomedical Imaging and Optics

Biomedical imaging and optics research develops and utilizes new experimental and computational tools to characterize tissue structure across multiple size scales. A particular focus is on human health, especially with respect to achieving superior diagnostic/prognostic tools for a spectrum of diseased states. Graduate students trained in this track are expected to gain a detailed understanding of mathematics, biology and engineering as well as optical and/or physical methods.

**Required courses:**

**At least 3 credits of Bioscience. Relevant options include:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT&amp;PHY 335</td>
<td>Physiology</td>
<td>3 or more</td>
</tr>
<tr>
<td>BIOCHEM 501</td>
<td>Introduction to Biochemistry</td>
<td></td>
</tr>
<tr>
<td>ZOOLOGY 570</td>
<td>Cell Biology</td>
<td></td>
</tr>
</tbody>
</table>

**At least 12 credits of Engineering. Relevant options include:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>B M E/H ONCOL/</td>
<td>Radiation Physics and Dosimetry</td>
<td></td>
</tr>
<tr>
<td>PHYSICS 501</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B M E/</td>
<td>Medical Imaging Systems</td>
<td></td>
</tr>
<tr>
<td>MED PHYS 530</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B M E/</td>
<td>Mathematical Methods in Medical Physics</td>
<td></td>
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<tr>
<td>MED PHYS 573</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B M E/</td>
<td>Data Science in Medical Physics</td>
<td></td>
</tr>
<tr>
<td>MED PHYS 574</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B M E/</td>
<td>Diagnostic Ultrasound Imaging</td>
<td></td>
</tr>
<tr>
<td>MED PHYS 575</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B M E/</td>
<td>Non-Ionizing Diagnostic Imaging</td>
<td></td>
</tr>
<tr>
<td>MED PHYS 578</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B M E/</td>
<td>The Physics of Medical Imaging with Ionizing Radiation</td>
<td></td>
</tr>
<tr>
<td>MED PHYS 580</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B M E/</td>
<td>Microscopy of Life</td>
<td></td>
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<tr>
<td>MED PHYS/</td>
<td></td>
<td></td>
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<tr>
<td>PHM/COL-M/PHYSI</td>
<td></td>
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<tr>
<td>RADIOL 619</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B M E/</td>
<td>Advances in Medical Magnetic Resonance</td>
<td></td>
</tr>
<tr>
<td>MED PHYS 710</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B M E/</td>
<td>Biological Optical Microscopy</td>
<td></td>
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<tr>
<td>CHEM/</td>
<td></td>
<td></td>
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<tr>
<td>MED PHYS 750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B M E 751</td>
<td>Biomedical Optics and Biophotonics</td>
<td></td>
</tr>
<tr>
<td>B M E/E C E/</td>
<td>Machine Learning in Ultrasound</td>
<td></td>
</tr>
<tr>
<td>MED PHYS 778</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B M E 780</td>
<td>Methods in Quantitative Biology</td>
<td></td>
</tr>
<tr>
<td>MED PHYS 777</td>
<td>Principles of X-ray Computed Tomography</td>
<td></td>
</tr>
</tbody>
</table>

**Electives (taken in consultation with your faculty advisor):**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>B M I/</td>
<td>Medical Image Analysis</td>
</tr>
<tr>
<td>COMP SCI 567</td>
<td></td>
</tr>
<tr>
<td>COMP SCI 300</td>
<td>Programming II</td>
</tr>
<tr>
<td>COMP SCI 320</td>
<td>Data Science Programming II</td>
</tr>
<tr>
<td>COMP SCI 368</td>
<td>Learning a Programming Language (multiple 1-credit options, including R, C++, and Matlab)</td>
</tr>
</tbody>
</table>
### Neuroengineering

Neuroengineering is the convergence of neuroscience, computation, device development, and mathematics to improve human health. Neuroengineering brings together state-of-the-art technologies for the development of devices and algorithms to assist those with neural disorders. It is also used to reverse engineer living neural systems via new algorithms, technologies and robotics. Students pursing this track are involved in all of these endeavors so that as the next generation of engineers, they will transcend the traditional boundaries of neuroscience, technology, engineering and mathematics.

**Required courses:**

- At least 3 credits of Bioscience. Relevant options include:
  - ANATPHY 335 Physiology
  - KINES 721 Neural Basis for Movement
  - KINES 861 Principles of Motor Control and Learning
  - NTP/NEURODPT 610 Cellular and Molecular Neuroscience
  - PSYCH 610 Design and Analysis of Psychological Experiments I
  - PSYCH 733 Perceptual and Cognitive Sciences
  - ZOOLOGY 625 Development of the Nervous System

- At least 12 credits of Engineering. Relevant options include:
  - BM E/E CE 462 Medical Instrumentation
  - BM E/E CE 463 Computers in Medicine
  - BM E 515 Therapeutic Medical Devices
  - BM E 520 Stem Cell Bioengineering
  - BM E 550 Introduction to Biological and Medical Microsystems
  - BM E 602 Special Topics in Biomedical Engineering (Introduction to Neuroengineering)
  - BM E 640 Medical Devices Ecosystem: The Path to Product
  - E CE/COMP SCI/ISY E 524 Introduction to Optimization
  - E CE/COMP SCI 533 Image Processing
  - E CE/COMP SCI/M E 539 Introduction to Artificial Neural Networks
  - NTP/MED PHYS 651 Methods for Neuroimaging Research

**Electives (taken in consultation with your faculty advisor):**

- COMP SCI 320 Data Science Programming II

**Systems and Synthetic Biology**

Systems and synthetic biology utilizes experimental and computational tools in an iterative fashion to analyze and regulate biological systems.

**Required courses:**

- At least 3 credits of Bioscience. Relevant options include:
  - BIOCHEM 570 Computational Modeling of Biological Systems
  - BIOCHEM 919 Synthetic Biology Seminar
  - BIOCHEM 501 Introduction to Biochemistry
  - BIOCHEM/GENETICS/MICROBIO 612 Prokaryotic Molecular Biology
  - BIOCHEM/GENETICS/MD GENET 620 Eukaryotic Molecular Biology
  - BIOCHEM 729 Advanced Topics
  - ZOOLOGY 570 Cell Biology
  - ZOOLOGY 630

- At least 12 credits of Engineering. Relevant options include:
  - B M E 550 Introduction to Biological and Medical Microsystems
  - B M E 556 Systems Biology: Mammalian Signaling Networks
  - B M E 780 Methods in Quantitative Biology
  - B M E/CBE 560 Biochemical Engineering
  - CBE 781 Biological Engineering: Molecules, Cells & Systems
  - CBE/B M E 782 Modeling Biological Systems
  - CBE 660 Intermediate Problems in Chemical Engineering

**Electives (taken in consultation with your faculty advisor):**

- B M I/STAT 541 Introduction to Biostatistics
- B M I/COMP SCI 576 Computational Network Biology
- B M I/COMP SCI 775 Advanced Bioinformatics
- B M I 826 Special Topics in Biostatistics and Biomedical Informatics
- COMP SCI 368 Learning a Programming Language (multiple 1-credit options available, including R, C++, and Matlab)
This program follows the UW–Madison University Special Student Career at UW–Madison. This program follows the UW–Madison University Special Graduate Residence Credit. These courses may not be used toward the Graduate School’s Minimum number of credits for admission to a M.S. degree is not allowed to satisfy requirements. Courses numbered 400 or above. Coursework earned five or more years prior to admission to a M.S. degree is not allowed to satisfy requirements. These courses may not be used toward the Graduate School’s Minimum Graduate Residence Credit. Students in this program cannot enroll concurrently in other undergraduate or graduate degree programs.

### POLICIES

#### GRADUATE SCHOOL POLICIES

The Graduate School’s Academic Policies and Procedures (https://grad.wisc.edu/acadpolicy/) provide essential information regarding general university policies. Program authority to set degree policies beyond the minimum required by the Graduate School lies with the degree program faculty. Policies set by the academic degree program can be found below.

#### NAMED OPTION-SPECIFIC POLICIES

### PRIOR COURSEWORK

Graduate Work from Other Institutions

This program follows the Graduate School’s policy for Satisfying Requirements with Prior Graduate Coursework from Other Institutions. (https://policy.wisc.edu/library/UW-1216/) Reach out to the BME Graduate Coordinator for more information.

#### UW–Madison Undergraduate

A student who has completed their bachelor’s degree at UW–Madison may transfer 6 credits of coursework with program approval. These courses must be engineering or advanced biological sciences coursework numbered 400 or above. Coursework earned five or more years prior to admission to a M.S. degree is not allowed to satisfy requirements. These courses may not be used toward the Graduate School’s Minimum Graduate Residence Credit.

#### UW–Madison University Special

This program follows the Graduate School’s policy for Transfer from UW–Madison University Special Student Career at UW–Madison. (https://policy.wisc.edu/library/UW-1216/) Reach out to the BME Graduate Coordinator for more information.

### PROBATION

This program follows the Graduate School’s Probation policy (https://policy.wisc.edu/library/UW-1217/).

### ADVISOR / COMMITTEE

This program follows the Graduate School’s Advisor policy (https://policy.wisc.edu/library/UW-1232)/.

### CREDITS PER TERM ALLOWED

15 credits

### TIME LIMITS

The accelerated MS program is typically completed in less than 18 months. This program follows the Graduate School’s Time Limits policy (https://policy.wisc.edu/library/UW-1221/).

### GRIEVANCES AND APPEALS

These resources may be helpful in addressing your concerns:

- Bias or Hate Reporting (https://doso.students.wisc.edu/bias-or-hate-reporting/)
- Graduate Assistantship Policies and Procedures (https://hr.wisc.edu/policies/gapp/#grievance-procedure)
- Hostile and Intimidating Behavior Policies and Procedures (https://hr.wisc.edu/hib/)
  - Office of the Provost for Faculty and Staff Affairs (https://facstaff.provost.wisc.edu/)
  - Dean of Students Office (https://doso.students.wisc.edu/) (for all students to seek grievance assistance and support)
  - Employee Assistance (http://www.eao.wisc.edu/) (for personal counseling and workplace consultation around communication and conflict involving graduate assistants and other employees, post-doctoral students, faculty and staff)
  - Employee Disability Resource Office (https://employeedisabilities.wisc.edu/) (for qualified employees or applicants with disabilities to have equal employment opportunities)
  - Graduate School (https://grad.wisc.edu/) (for informal advice at any level of review and for official appeals of program/departmental or school/college grievance decisions)
  - Office of Compliance (https://compliance.wisc.edu/) (for class harassment and discrimination, including sexual harassment and sexual violence)
  - Office of Student Conduct and Community Standards (https://conduct.students.wisc.edu/) (for conflicts involving students)
  - Ombuds Office for Faculty and Staff (http://www.ombuds.wisc.edu/) (for employed graduate students and post-docs, as well as faculty and staff)
  - Title IX (https://compliance.wisc.edu/titleix/) (for concerns about discrimination)

### BME Grievance Procedures

If a student feels unfairly treated or aggrieved by faculty, staff, or another student, the University offers several avenues to resolve the grievance.

**Step 1**

The student is encouraged to speak first with the person toward whom the grievance is directed to see if a situation can be resolved at this level. Students are also encouraged to talk with their faculty advisors regarding concerns or difficulties, or reach out to the Graduate Student Services Coordinator or Associate Chair of BME Graduate Advising for additional assistance. These activities do not rise to the level of a formal grievance;
however, the student is encouraged to keep documentation of these interactions as they may be useful if a formal grievance is pursued.

**Step 2**

Should a satisfactory resolution not be achieved, a formal grievance can be filed with the BME Grievance Committee. To do so, the student contacts the Department Administrator, who will provide the student with the name of the current chair of the Grievance Committee. The student will then contact the Chair of the Grievance Committee, who will reply within seven calendar days. If the grievance is with the current Chair of the Grievance Committee, please let the Department Administrator know and they will identify an alternate committee member to contact. It is advised that grievances are filed within 60 calendar days of the alleged unfair treatment to enable a thorough investigation.

**Step 3**

If the student does not feel comfortable working through the departmental process, they are encouraged to seek out other campus resources including:

- The Assistant Dean for Graduate Affairs in the College of Engineering
- The Graduate School
- UW Division of Diversity, Equity & Educational Achievement (DDEEA)
- McBurney Disability Resource Center
- Employee Assistance Office
- Ombuds Office
- University Health Services

**Step 4**

At this point, if either party (the student or the person toward whom the grievance is directed) is unsatisfied with the decision of the faculty committee, the party may file a written appeal. Either party has ten working days to file a written appeal to the School/College. For more information, students should consult the College of Engineering Academic Advising Policies and Procedures.

**Step 5**

Documentation of the grievance will be stored for at least seven years. Significant grievances that set a precedent will be stored indefinitely. The Graduate School has procedures for students wishing to appeal a grievance decision made at the school/college level. These policies are described in the Graduate School’s Academic Policies and Procedures.

**OTHER**

Students are strongly discouraged to pursue positions as Project Assistants, Teaching Assistants or Research Assistants during their time in this program, as the rigor and accelerated nature of this program may not accommodate those work time commitments. Students in this program will not receive the tuition remission that is typically part of the compensation package for a graduate assistantship.

**PROGRAM RESOURCES**

**THE INDIVIDUAL DEVELOPMENT PLAN (IDP)**

An Individual Development Plan (IDP) ([https://grad.wisc.edu/pd/idp/](https://grad.wisc.edu/pd/idp/)) helps graduate students and postdoctoral researchers:

- assess current skills, interests, and strengths;
- make a plan for developing skills to meet academic and professional goals; and
- communicate with supervisors, advisors, and mentors about evolving goals and related skills.

The IDP is a document to be revisited again and again, to update and refine as goals change and/or come into focus, and to record progress and accomplishments.

The university recommends IDPs for all postdoctoral researchers and graduate students, and requires IDPs for all postdoctoral researchers and graduate students supported by National Institutes of Health (NIH) funding. See the Graduate School for more information and IDP resources ([https://grad.wisc.edu/pd/idp/](https://grad.wisc.edu/pd/idp/)).

**ENGINEERING CAREER SERVICES**

The Engineering Career Services ([https://ecs.wisc.edu/](https://ecs.wisc.edu/)) staff offers assistance to students searching or preparing for internships, co-ops, and jobs with well-recognized organizations.

**THE WRITING CENTER**

The Writing Center ([https://writing.wisc.edu/](https://writing.wisc.edu/)) is a campus-wide organization that provides free of charge, face-to-face and online consultations for students writing papers, reports, resumes, and applications.

**PEOPLE**

**FACULTY**

Paul Campagnola (Chair)
Randolph Ashton
David Beebe
Walter Block
Christopher Brace
Kevin Eliceiri
Shaoqin ’Sarah’ Gong
Aviad Hai
Melissa Kinney
Pamela Kreeger
Wan-ju Li
Kip Ludwig
Kristyn Masters
Megan McClean
Beth Meyerand
William Murphy
Krishanu Saha
Melissa Skala
Darryl Thelen
Justin Williams
Colleen Witzenburg
Filiz Yesilkoy

**PROFESSIONAL DEVELOPMENT**

**GRADUATE SCHOOL RESOURCES**

Take advantage of the Graduate School’s professional development resources ([https://grad.wisc.edu/pd/](https://grad.wisc.edu/pd/)) to build skills, thrive academically, and launch your career.
INSTRUCTIONAL STAFF AND TEACHING FACULTY

Amit Nimunkar
John Puccinelli
Tracy Jane Puccinelli
Darilis Suarez-Gonzalez
Aaron Suminski

See also Biomedical Engineering Faculty Directory (http://directory.engr.wisc.edu/bme/).