Table of Contents

The Biomedical Engineering Graduate Program.....................................................................................................4

Timetable for BME MS Research Students .........................................................................................................4–5
Finding an Advisor
MS Course Requirements
Leave Policies
Changing Degree Levels

Arriving on Campus ..................................................................................................................................................6
Obtain a Wiscard
Navigate Campus
Verify Contact Information and Online Logins
Pay Tuition and Fees
Check in with International Student Services

BME Departmental Graduate Expectations ........................................................................................................7–8
What We Expect From You
What You Can Expect From the BME Program
What You Can Expect From Your Research Advisor
About Your RA/PA/TA Position

Process to Change Your Advisor ..............................................................................................................................9

Class Registration and Credit Load ...................................................................................................................10–11
Credit Load Requirements for Full-Time Students
Unique Registration Situations
Requesting Transcripts

Suggested Courses............................................................................................................................................. 12–14

MS Thesis Requirement ..........................................................................................................................................15
Format
Defense

 Completing a Graduate Degree ........................................................................................................................ 16-17
Requirements for Graduation
Things to Remember When Finishing a Degree
Commencement
# Table of Contents

**Academic Standards** ................................................................................................................................................ 18
  - Satisfactory Progress
  - Probation

**Grievance Procedures** ............................................................................................................................................. 19
  - Procedures for the Proper Accounting of Student Grievances

**Hostile and Intimidating Behavior** .....................................................................................................................20-21
  - What is Hostile and Intimidating Behavior?
  - What to Do if You Feel You’ve Been the Target of Hostile and Intimidating Behavior

**Assistantship Opportunities** ..............................................................................................................................22-23
  - Applying for Research Assistantships (RAs)
  - Applying for Teaching Assistantships (TAs)
  - Teaching Assistantship Expectations
  - Applying for Project Assistantships (PAs)
  - Health Insurance and Leave Benefits for Assistantships

**Quick Links: Student Resources** ........................................................................................................................24-25
  - Calendars
  - Campus and Academic Life
  - Computers
  - Department Resources
  - Diversity
  - Health and Wellness
  - Learning Resources and Assistance
The Biomedical Engineering Graduate Program

The biomedical engineering graduate program is of interest to students who wish to practice engineering or engage in medical and biological research with an engineering specialization. Graduates are employed in industry, government labs, universities and non-profit organizations.

The biomedical engineering program offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in biomedical engineering. The MS Research is intended for students who want a research-based MS; most MS Research students are continuing projects they worked on as an undergraduate. A timeline of the MS Research program can be found below.

All policies from the Graduate School’s Academic Policies and Procedures document apply to BME graduate students; including protections from harassment, accommodation for disabilities, etc. Student questions and concerns regarding the program can be directed to the Associate Chair of Graduate Advising.

Timetable for BME MS Research Students

<table>
<thead>
<tr>
<th></th>
<th>Program Milestones</th>
<th>Coursework Milestones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1: Semester 1</td>
<td>Identify Faculty Advisor</td>
<td>BME 703: Responsible Conduct in Research strongly suggested</td>
</tr>
<tr>
<td>Year 1: Semester 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2: Semester 3 or 4</td>
<td>Defend MS Thesis</td>
<td>Coursework complete; MS degree filing</td>
</tr>
</tbody>
</table>
Timetable for BME MS Research Students

Finding an Advisor
All graduate students need to identify a faculty advisor or co-advisor with a BME affiliation within the first semester of matriculation. A faculty advisor provides the student with academic guidance in their course program and research oversight in their thesis—for most RA/PA this will be the faculty member that provides funding. The advisor must be a primary BME faculty or a BME affiliate; if the advisor is a BME affiliate, the student must identify a primary BME faculty to serve as co-advisor. MS Research students have often identified this advisor prior to applying (e.g. previous undergrad advisor or design client).

If there are questions, direct them to the Associate Chair of Graduate Advising. More information about the expectations for student-advisor relationships can be found on page 8. If a change in advisor is necessary for any reason, please see the information on page 9.

MS Course Requirements
Students file for a MS degree once they have completed 6 credits of research and 24 credits of course work that include:

- BME 701: Seminar (2 credits)
- At least 12 credits of engineering courses, 400-level or above other than BME 701
- At least 3 credits of biological science
- At least 15 credits in one area of specialization, 400-level or above
- At least 15 credits that are graduate level (see page 10 for more details)

A general course load is two courses per semester, but that is flexible. Students who completed their BS at UW–Madison may count up to 6 credits of coursework, numbered 300 or above, towards their degree with approval by the Graduate Student Services Coordinator.

Leave Policies
RA and TA leave is described in the Graduate School’s Academic Policies and Procedures.

Parental Leave is provided under a policy approved by the College of Engineering, please discuss the specifics of your situation with the BME Payroll and Benefits Specialist. Program timeline requirements will be adjusted as needed for extended leaves (>4 consecutive weeks).

Changing Degree Levels
Some students who plan to complete only a MS degree choose to apply to the PhD program to continue their studies. If the decision is made before the start of the third semester the student may be able to complete the PhD requirements on a standard timeline (see the BME PhD Handbook).

To apply to the PhD program, email the Associate Chair of Graduate Advising with the following: 1) an updated personal statement indicating who will be the research advisor for the PhD and why this change is desired and 2) an unofficial transcript of all MS coursework. The student should also request that the planned PhD advisor submit a letter directly to the Associate Chair of Graduate Advising (the other two letters can be from the MS Research application or can be updated). The admissions committee will evaluate within two weeks of receiving all materials. International students must also inform the International Student Services Office as soon as they decide to change their degree level by completing a Change of Level form.
Arriving on Campus

Upon arrival, students should review campus guidelines and complete the following tasks to make sure that their time on campus starts smoothly.

Obtain a Wiscard
The student ID, or Wiscard, is the key to campus life. Students use their Wiscards as a library card, to purchase school supplies and food on campus, as a key card for certain buildings that faculty grant them access to, and more. Having a Wiscard is a prerequisite for many activities on campus, so it is essential that students stop by the Wiscard Office in Union South Room 149 between 8:30 a.m. and 5 p.m. Monday–Friday as soon as possible after arriving in Madison. In order to receive a Wiscard you must present some form of personal photo identification such as a valid passport or U.S. driver’s license.

Navigate Campus
Students can explore the UW campus via map online before setting out on foot, bike, bus, or car. The Associated Students of Madison (ASM) provide students with a free bus pass. Transportation Services can be referenced for bus routes and all other transportation services available.

Verify Contact Information and Online Logins
To be sure that they can connect with fellow students and campus offices, students should verify that they can log in to their MyUW account and confirm their mailing address and phone number. The campus information technology division, known as DoIT, should be contacted through the DoIT Help Desk if students encounter any difficulties accessing MyUW.

Each student’s NetID will allow them to log in to a personalized, secure BOX folder at the beginning of their program. This folder will allow the student to exchange information with their advisor(s) regarding their academic plan. Students will maintain digital versions of their degree program planning forms for each semester of their program here.

Pay Tuition and Fees
Student account invoices are sent by mail and updated in MyUW each semester. Questions can be directed and payments made to the Bursar’s Office in person on East Campus Mall or online. For students with an RA/TA position, tuition will be paid automatically. Any difficulties should be reported immediately to your faculty advisor.

Check In with International Student Services
International students who are on a student scholar or visa must check in with International Student Services at the Red Gym immediately upon arrival.
The process to earning a graduate degree is a unique experience for each student — as such, it can at times be confusing to know what is expected from the student, their advisor, and the program. Therefore, the BME program has assembled a set of expectations that we hope will assist each student to navigate this process. Individual advisors are also encouraged to outline their expectations for their mentees; however, the expectations outlined here supersede these in cases of disagreement.

You will become familiar with the requirements for completing your graduate degree (overview timetable is on page 4). If you have questions, you should raise them with the Graduate Student Services Coordinator, your advisor, or the Associate Chair of Graduate Advising as early in your career as possible.

You are encouraged to enroll in BME 703: Responsible Conduct of Research course in your first year on campus (only offered in fall). This course will provide more information on the following expectations:

- You will conduct your research ethically and with integrity.
- You will work safely in the lab. Before beginning in the lab, you must complete appropriate safety training.
- You will remember that data belongs to the lab, not to any one individual. Your original notebooks and files will remain when you leave the lab.

You will be respectful, tolerant, and work collegially with BME students, faculty, and staff and will not participate in harassment, bias, or hostile/intimidating behavior.

You will participate in the annual GOAALS (Graduate online assessment and achievement learning system) in CoE.

What We Expect From You

You will become familiar with the requirements for completing your graduate degree (overview timetable is on page 4). If you have questions, you should raise them with the Graduate Student Services Coordinator, your advisor, or the Associate Chair of Graduate Advising as early in your career as possible.

You are encouraged to enroll in BME 703: Responsible Conduct of Research course in your first year on campus (only offered in fall). This course will provide more information on the following expectations:

- You will conduct your research ethically and with integrity.
- You will work safely in the lab. Before beginning in the lab, you must complete appropriate safety training.
- You will remember that data belongs to the lab, not to any one individual. Your original notebooks and files will remain when you leave the lab.

You will be respectful, tolerant, and work collegially with BME students, faculty, and staff and will not participate in harassment, bias, or hostile/intimidating behavior.

You will participate in the annual GOAALS (Graduate online assessment and achievement learning system) in CoE.

What You Can Expect From the BME Program

We will provide an environment that is intellectually stimulating, supportive, safe, and free from harassment, bias, and hostile/intimidating behavior.

If you are concerned about your interactions with your MS advisor or your research progress, the Associate Chair of Graduate Advising and/or the BME Chair will work with you to resolve the situation:

- If this concern is brought about by the MS advisor not meeting the expectations below, please report this to the Associate Chair of Graduate Advising, the Assistant Dean for Graduate Affairs in the CoE, the Chair, or the Grievance Committee. These groups will work together to help remedy the situation or help you find a new lab (through rotations if desired).
- If this concern is brought about by a change in research interests, please discuss this first with your MS advisor to determine if there is an immediate solution (e.g. change in project in the lab, working with a collaborator). If there is no immediate solution, you should next meet with the Associate Chair of Graduate Advising who will work with you to identify a new lab. It is expected that you will take an active role in this process to find a new lab within one semester.
- During the semester of transition, the BME department will work to ensure that funding is continued, you remain enrolled as a full-time student, and your visa status is not impacted.

Once you have earned your MS, you will always be an alum of our department. As such, the department is always available to confirm that you have earned this degree.
BME Departmental Graduate Expectations

What You Can Expect From Your Research Advisor

- They will be respectful, tolerant, and work collegially with you.
- They will help you to identify an initial research direction during your first year.
- They will identify the safety training that you must complete.
- They will meet with you to discuss research progress on a regular basis.
- They will participate in the annual GOALLS assessment through CoE and meet with you annually to discuss your Individual Development Plan (IDP).

About Your RA/PA/TA Position

These positions are fully defined in the Graduate School’s Academic Policies and Procedures. Note in particular:

“It is understood that RAs are engaged in professional activities of such a nature that the output produced or the result accomplished cannot be precisely measured in relation to a given period of time.”

As part of your position as a researcher in a lab, it is reasonable for you to have some lab-associated duties (e.g., ordering, maintaining equipment, training new students). If you feel these duties are excessive, you should discuss this with your MS advisor. If this does not resolve the situation, you should then discuss your concerns with the Associate Chair of Graduate Advising and/or the BME Grievance Committee.

RA/PA/TA funds do not oblige you to participate in any activities outside of UW–Madison (e.g., babysitting, helping a faculty member with personal chores). If you are pressured to do activities of this sort, you should report this to the Assistant Dean for Graduate Affairs in the CoE.
Process to Change Your Advisor

On occasion, there are situations where a student requests to switch to a different faculty research advisor to conduct their thesis work. Sometimes these changes are motivated scientifically – perhaps your interests changed. Other times they are motivated by personal concerns related to the advisor/student relationship or group atmosphere. No matter the circumstances, a graduate student does not have to remain linked permanently to a faculty advisor. As described in the UW–Madison Graduate School policies:

“The advisor/student relationship is one of mutual agreement, which may be terminated by either party. If a student changes advisor, they need to notify their program coordinator. It is the responsibility of every graduate student to have an advisor.”

In cases where an advisor or environment does not meet the expectations of the College of Engineering, your immigration status and salary will not be impacted during the process of finding a new project. As you consider this change:

- If you are comfortable, have conversations with your faculty advisor. This is often the appropriate strategy when your change is scientifically motivated. Discuss the reasons you are considering a change and see if there are solutions that you and your faculty advisor can implement to either allow you to stay in the lab or help you identify a new laboratory. You will want to be certain that your conversations are sufficiently clear, and if you feel it would be useful you can involve an outside party such as a committee member or faculty member you have had a positive interaction with. If you ultimately decide to switch to a new lab, you will need to report this change to the Associate Chair of Graduate Advising.

- Alternatively, if you are not comfortable having the conversation with your faculty advisor for any reason, you should contact the Associate Chair of Graduate Advising or the Assistant Dean for Graduate Affairs in the College of Engineering to set up a meeting and discuss your individual situation. This is usually the appropriate course of action when your change is motivated by concerns with the advisor/student relationship or group atmosphere. They will have this conversation with you without involving your faculty advisor either until you are ready or if necessary, without involving your faculty advisor at all.

Points to consider during a transition:

- It may take time to identify a new faculty advisor—you want to do your diligence to be sure you land in a good situation.
- Changing advisors can be stressful—reach out to UHS if speaking with a counselor would be helpful.
- You may need to develop a plan for completing any remaining work with your current advisor.
- Remember, the department is invested in your success and well-being. We will work with you through this process.
Class Registration and Credit Load

Course registration is accessed online through MyUW in Course Search & Enroll. A Net ID and password are required for log in. Tutorials on navigating Student Center are available through the Enrollment Help Desk.

The minimum credit load to be considered a graduate student is two graduate-level credits. A student taking 2-6 credits during the fall or spring semester is considered a part-time graduate student. The below credit load requirements apply to full-time graduate students. When enrolling, students should remember both the credit load requirements for their status as a graduate student (and, if applicable, their position as a RA/TA/PA) as well as the types and levels of courses needed to complete their degree.

Credit Load Requirements for Full-Time Students

<table>
<thead>
<tr>
<th></th>
<th>Fall and Spring Semester</th>
<th>Summer Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Rule</td>
<td>8-15 Credits</td>
<td>4-8 Credits</td>
</tr>
<tr>
<td>Non-dissertator TAs and RAs</td>
<td>8 Credits</td>
<td>2 Credits</td>
</tr>
<tr>
<td>with &gt;33%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Students</td>
<td>8-15 Credits</td>
<td>Not required (unless being paid)</td>
</tr>
</tbody>
</table>

**Fall and Spring**
A student taking 8-15 credits during the fall or spring semester is considered a full-time graduate student. The maximum credit load for fall and spring semester is 15 graduate-level credits. (Note: taking more than 12 credits per semester is not recommended.) Students who are being paid as an RA, TA or PA must be enrolled as a full-time student.

**Summer**
Enrollment for summer is not required for graduate students. However, it is required for any student who is being paid as an RA over the summer. During the summer, students who are required to enroll must take at least 2 credits.

**PLEASE NOTE:** Courses taken pass/fail, for audit, or below 300 do not count towards these minimums or maximums. They are in essence counted as zero credits. Students cannot take courses pass/fail or for audit while having dissertator status. Graduate level courses are either greater than 700 level or have a designation as having a “50% graduate coursework requirement” in the course guide. Questions about a specific course should be directed to the Graduate Student Services Coordinator.
Class Registration and Credit Load

Unique Registration Situations
Each student's program plan is unique and may require additional steps for registration or coursework documentation; the following are the most common scenarios that students encounter during registration and the processes to follow regarding proper registration.

Carrying a Credit Overload
In order to enroll in more than the maximum credit load, students must submit a Credit Overload Request form, have it signed by their faculty advisor, and return it to the Graduate School at 217 Bascom Hall. The request must be approved by the Add Deadline in order for a student to take more than the max credit load; the student is responsible to add the overload course.

Registering for a Closed BME Class
To register for a waitlisted BME course (▲), students should use the waitlist system. To register for a closed BME course (■), students should contact the instructor of the course with their campus ID, course number, and number of the lab/discussion section (if needed). An online instructions on how to use the waitlist can be found here.

Registering for Graduate Level Independent Study, Research or Thesis Credits
BME students interested in BME research credits (BME 799 and 790) should enroll in the appropriate course and faculty member section during the general enrollment periods. It is the student’s responsibility to enroll with the correct course and faculty member section. Incorrect enrollment may result in an incomplete or unsatisfactory grade. The faculty section is generally the student’s research advisor. In the case of co-advised students, credit should be split between advisors each semester as appropriate.

- BME 799: Master's level independent study
- BME 790: Master's level thesis

Requesting Transcripts
Students can order "unofficial" transcripts at any time by following the instructions listed here.

Official transcript orders can be placed here.
Suggested Courses

A list of courses that fulfill the biology requirement is provided below, as well as a list of relevant courses for mathematics and analysis that could be important for your specialization. Finally, engineering courses relevant to BME specializations are provided. Additional course options can be found in the PhD Handbook in the PhD Tracks. A MS student does not have to follow a PhD Track, but the PhD Tracks can be useful guidance if a student is considering switching degrees.

Biology

ANAT & PHYS 335: Physiology
ANAT & PHYS 435: Fundamentals of Human Physiology
BIOCHEM 501: Introduction to Biochemistry
CRB 640: Fundamentals of Stem Cell and Regenerative Biology
CRB 650: Molecular and Cellular Organogenesis
CRB 670: Biology of Heart Disease and Regeneration
KINES 350: Introduction to Exercise Psychology
KINES 531: Neural Control of Movement
KINES 773: Cardiorespiratory Adaptations to Environment and Exercise
MM&I 528: Immunology
NTP 610: Cellular and Molecular Neuroscience
NTP 611: Systems Neuroscience
ZOOLOGY 470: Introduction to Animal Development
ZOOLOGY 523: Neurobiology
ZOOLOGY 570: Cell Biology
ZOOLOGY 630: Cellular Signal Transduction Mechanisms

Mathematics and Analysis

BMI/STAT 541: Introduction to Biostatistics
BMI 776: Advanced Bioinformatics
COMP SCI 300: Programming II
COMP SCI 320: Data Programming II
COMP SCI 368: Learning a Programming Language (that there are multiple 1 credit options, including R, C++, and Matlab)
COMP SCI 532: Matrix Methods in Machine Learning
COMP SCI 765: Data Visualization
COMP SCI 766: Computer Vision
COMP SCI 767: Computational Methods for Medical Image Analysis
ECE 630: All of Signal Processing
MATH 443: Applied Linear Algebra
MATH 519: Ordinary Differential Equations
MATH 619: Analysis of Partial Differential Equations
STAT 571: Statistical Methods for Bioscience I
STAT 877: Statistical Methods for Molecular Biology
Suggested Courses

Specialization: Biomaterials and Tissue Engineering

BME 430: Biological Interactions with Materials
BME 510: Introduction to Tissue Engineering
BME 511: Tissue Engineering Laboratory
BME 520: Stem Cell Bioengineering
BME 545: Engineering Extracellular Matrices
BME 550: Introduction to Biological and Medical Microsystems
BME 602: CRISPR Genome Editing and Engineering Laboratory
BME 730: Current Topics in Stem Cell Engineering
CBE 540: Polymer Science and Technology
CBE 562: Cellular Biomanufacturing
CBE 648: Synthetic Organic Materials in Biology and Medicine
CBE 781: Biological Engineering: Molecules, Cells and System
CHEM 654: Materials Chemistry of Polymers
MSE 521: Advanced Polymeric Materials

Specialization: Biomechanics

BME/ME 414: Orthopaedic Biomechanics–Design of Implants
BME/ME 415: Biomechanics of Human Movement
BME/ME 603: Finite Elements for Biomechanics
BME/ME 603: Imaging Biomechanics
BME/ME 603: Cell Mechanics
BME/ME 603: Advanced Cardiovascular Biomechanics
BME 505: Biofluidics
BME 615: Tissue Mechanics
ME 540: Experimental Vibration and Dynamic System Analysis
ME/EMA 508: Composite Materials
ME 563: Intermediate Fluid Mechanics
ME/EMA 570: Experimental Mechanics
ME 573: Computational Fluid Dynamics
EMA 506: Advanced Mechanics of Materials I
EMA 519: Fracture Mechanics
EMA 541: Heterogeneous and Multiphase Materials
EMA 545: Mechanical Vibrations
EMA 605: Introduction to Finite Elements
EMA 615: Micro- and Nanoscale Mechanics
EMA 622: Mechanics of Continua
EMA 630: Viscoelastic Solids
EMA 700: Theory of Elasticity
Suggested Courses

Specialization: Imaging
BME 602: Biophotonics Lab
BME 751: Biomedical Optics and Biophotonics
BME/MED PHYS 501: Radiation Physics and Dosimetry
BME/MED PHYS 530: Medical Imaging Systems
BME/MED PHYS 573: Medical Image Science: Mathematical and Conceptual Foundations
BME/MED PHYS 574: Imaging in Medicine: Applications
BME/MED PHYS 578: Non-Ionizing Diagnostic Imaging
BME/MED PHYS 580: The Physics of Medical Imaging with Ionizing Radiation
BME/MED PHYS 619: Introduction to Multiscale Imaging
BME/MED PHYS 710: Advances in Medical Magnetic Resonance
BME/CHEM/MED PHYS 750: Biological Optical Microscopy
MED PHYS 777: Principles of X-Ray Computed Tomography

Specialization: Medical and Micro Devices
BME 462: Medical Instrumentation
BME 515: Therapeutic Medical Devices
BME/MED PHYS 535: Intro to Energy-Tissue Interactions
BME 550: Introduction to Biological and Medical Microsystems
BME 602: Biophotonics Lab
BME 602: Medical Devices Ecosystem
BME 602: Introduction to Neuroengineering
BME 750: Biological Optical Microscopy

Specialization: Neuroengineering
BME 515: Therapeutic Medical Devices
BME 550: Introduction to Biological and Medical Microsystems
BME 602: Introduction to Neuroengineering
BME 602: Medical Devices Ecosystem
ECE/BME 462: Medical Instrumentation
ECE/BME 463: Computers in Medicine

Specialization: Systems and Synthetic Biology
BME 556: Systems Biology: Mammalian Signaling Networks
BME 780: Methods in Quantitative Biology
CBE/BME 560: Biochemical Engineering
CBE 781: Biological Engineering: Molecules, Cells and Systems
CBE/BME 782: Modeling Biological Systems
BIOCHEM 570: Computational Modeling of Biological Systems
BIOCHEM 919: Synthetic Biology
BMI 755: Computational Network Biology
To complete the MS Research degree, the student must complete a written thesis documenting their research. The thesis does not have to be deposited with Memorial Library.

Format
The thesis must include an abstract, introduction, methods, results, discussion, and references. The advisor and student can determine if this is better presented as 1) a continuous document with one section for each of these topics, 2) a document with chapters for distinct research projects that each contain these topics, or 3) another variation that effectively communicates the research.

Defense
At the beginning of the final semester, the student will form their thesis committee. This committee consists of their advisor/advisors (including a primary BME faculty for those students directly mentored by a BME affiliate), an additional BME faculty member (primary or affiliate), and an additional faculty member that can be from any department (including BME if an outside expert is not needed).

The thesis is submitted to the committee for review two weeks before the scheduled defense. The defense will be an oral presentation of approximately 20-30 minutes that is open to the public, followed by a closed question and answer period with the committee. Following the defense, revisions are made to the thesis as required by the committee and the advisor will sign the thesis documentation.
Completing a Graduate Degree

The Graduate Student Services Office (3180 Mechanical Engineering) will send out an email at the beginning of each semester requesting the names of students who plan to graduate. This email will contain instructions and deadlines for submitting final degree warrant information for graduation. Students must also indicate plans for graduation in their MyUW Student Center at the beginning of their final semester.

Students should be knowledgeable of campus-wide Graduate School Degree and Dissertation Eligibility Deadlines and ensure that the following, program-specific requirements and paperwork are completed at least 3 weeks before graduation.

Requirements for Graduation

To be eligible for graduation, a student must:

- Complete a MS Warrant Request form (found in student's BOX file) approved by the student’s faculty advisor and the Associate Chair of Graduate Advising. Contact the Graduate Student Services Coordinator so a final warrant can be requested by the deadline (please note this form MUST be accompanied by a paragraph describing the student’s area of specialization).
- Be enrolled in at least 2 credits term you expect to earn your degree (students should note that once a student submits their MS degree warrant, they will no longer be able to enroll in courses).
- Have a GPA of 3.0 or higher.
- Meet all MS degree requirements listed in this document.
- Have all grades entered (except for the current semester; no Is or NRs can be present on transcript).
- **Double MS Degrees**: students receiving a second master's degree from UW–Madison and students receiving two master's degrees during the same semester must submit official lists of courses used for each degree. Students can overlap up to 25% of credits from the program with the lower degree credit requirement.
- Complete the online exit survey.
Things to Remember When Finishing a Degree

End of Student Status and Financial Support
All graduate students will retain student status through the end of the semester, until the official date of graduation and at that time are no longer eligible for financial support. If the student holds an assistantship or a fellowship, the student must consult with his or her advisor and the Payroll and Benefits Specialist to determine the end date of the appointment and its ramifications.

Diplomas
Diplomas will be mailed 12-14 weeks after the degree deadline to the mailing address listed in the Student Center. All international students are required to enter a diploma address into their Student Center to receive a diploma. Consult the Office of the Registrar's page on diplomas for more information.

Feedback
An online survey will be emailed to all graduate students completing their degree. This survey is extremely helpful to the department in tracking where students go after graduation. We greatly appreciate cooperation in completing this survey. In-person interviews are also possible for MS degrees.

Email and Continued Department Communications
Student email can be accessed after graduation. Consult the university's KnowledgeBase (KB) for more information on alumni access to email services.

Students should remember to keep in touch via Facebook, Twitter, and LinkedIn, and feel free to contact the BME department or Student Services Office with any questions or concerns after graduation.

Commencement
Once a student has met their degree requirements, they may choose to attend a fall or spring commencement ceremony. Students should reference the Graduate School's and the university's information regarding commencement for more details regarding preparing for the ceremony proper attire, dates and times.

College of Engineering Graduate Recognition Event
The College of Engineering holds a Graduate Recognition event every spring semester after the Saturday commencement ceremony. Students who are graduating with a BS, MS or PhD engineering degrees are welcome to take part in the College of Engineering event. Learn more on the College of Engineering graduation webpage.
Students should note the below university, college, and departmental policies regarding graduate student academic performance:

**Satisfactory Progress**

The Graduate School requires that students maintain a minimum graduate GPA of 3.00 in all graduate-level work (300 or above, excluding research, audit, credit/no credit, and pass/fail courses) taken as a graduate student unless probationary admission conditions require higher grades. The Graduate School also considers Incomplete (I) grades to be unsatisfactory if they are not removed during the next fall or spring semester in which a student is enrolled; however, the instructor may impose an earlier deadline. A student may be placed on probation or suspended from the Graduate School for low grades or for failing to resolve incompletes in a timely fashion. In special cases, the Graduate School permits students who do not meet these minimum standards to continue on probation upon recommendation and support of their advisor.

The BME program requires satisfactory progress to continue funding support. Satisfactory progress includes meeting the departmental and advisor expectations (page 7).

**Probation**

If a student was admitted on probation and they satisfy the conditions outlined at the time of admission, probationary status will be removed automatically. Once their studies have begun, students are expected to make satisfactory progress toward their degree. Students must be in good academic standing with the Graduate School, their program, and their advisor.

The Graduate School regularly reviews the record of any student who received grades of BC, C, D, F, or I in graduate-level courses (300 or above), or grades of U in research and thesis. This review could result in academic probation with a hold on future enrollment, and the student may be suspended from graduate studies. The Graduate School may also put students on probation for incompletes not cleared within one term. All incomplete grades must be resolved before a degree is granted.

Please note that any student who is on probation will not be able to enroll for the following semester until their final grades are submitted and the Graduate School has verified they are making satisfactory progress.
If a student feels unfairly treated or aggrieved by faculty, staff, or another student, the University offers several avenues to resolve the grievance.

Procedures for Proper Accounting of Student Grievances

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 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 (UHS)

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.
Hostile and Intimidating Behavior

Hostile and intimidating behavior, sometimes known by the shorthand term “bullying,” is defined in university policy as “unwelcome behavior pervasive or severe enough that a reasonable person would find it hostile and/or intimidating and that does not further the University’s academic or operational interests.”

Hostile and intimidating behavior (HIB) can occur in the university setting. Even individual instances of such behavior can have a significant effect on the person it’s aimed at, and can take a physical and emotional toll, reducing the effectiveness of a person’s work or learning. It is a significant reason for unhealthy workplace climate and culture and should be addressed immediately. Hostile and intimidating behavior is prohibited by university policy.

What is Hostile and Intimidating Behavior?

Hostile and intimidating behavior is defined as unwelcome behavior pervasive or severe to the extent that it makes the conditions for work inhospitable and impairs another person’s ability to carry out his/her responsibilities to the university, and that does not further the University’s academic or operational interests. A person or a group can perpetrate this behavior. The person need not be more senior than or a supervisor to the target. Unacceptable behavior may include, but is not limited to:

1. Abusive expression (including spoken, written, recorded, visual, digital, or nonverbal, etc.) directed at another person in the workplace, such as derogatory remarks or epithets that are outside the range of commonly accepted expressions of disagreement, disapproval, or critique in an academic culture and professional setting that respects free expression;

2. Unwarranted physical contact or intimidating gestures; Conspicuous exclusion or isolation having the effect of harming another person’s reputation in the workplace and hindering another person’s work;

3. Sabotage of another person’s work or impeding another person’s capacity for academic expression, be it oral, written, or other;

4. Abuse of authority, such as using threats or retaliation in the exercise of authority, supervision, or guidance, or impeding another person from exercising shared governance rights, etc.

Repeated acts or a pattern of hostile and/or intimidating behaviors are of particular concern. A single act typically will not be sufficient to warrant discipline or dismissal, but an especially severe or egregious act may warrant either.
Hostile and Intimidating Behavior

What to Do if You Feel You’ve Been the Target of Hostile and Intimidating Behavior

Undesired consequences of hostile and intimidating behavior can be avoided or minimized when the problem is addressed early on, but victims are often hesitant to pursue a formal process before the impact is severe. Educational opportunities and campus resources have been implemented with the intent of aiding all employees and students in defusing situations before they become severe. These resources, including trained personnel who can advise and mediate, comprise the “informal process.” It is possible that situations will continue to arise in which informal interventions are not effective, and the “formal process” has been designed to address those situations.

You are encouraged to seek out advice and consultation after the first instance of hostile and intimidating behavior: consultation is not escalation. Discussing what’s happened in a timely way can often prevent continued bullying. Here are some ways to do this:

1. Seek advice from a trusted colleague;
2. You may choose to seek informal resolution by approaching the individual yourself or with an intermediary;
3. Consult your advisor, human resources representative, department chair, director, dean, or any campus resource to discuss options for resolution;
4. Keep notes of what happened, when, where, and who was present. Retain copies of any correspondence.

Graduate students sometimes experience hostile and intimidating behavior from faculty members. If you are a student who is experiencing such behavior, you are entitled to support as a university employee through the Ombuds office, the Dean of Students office, and the Graduate School. Graduate students can also consult with Graduate Coordinators and/or the Graduate School.

BME graduate students with concerns may contact the College of Engineering Assistant Dean for Graduate Affairs, the Associate Chair of Graduate Advising, or the BME Grievance Committee. Additional campus information on hostile and intimidating behavior is available here.
Assistantship Opportunities

Three common types of financial support are Research Assistantships, Teaching Assistantships, and Project Assistantships (RA/TA/PA respectively). Research Assistants, Teaching Assistants, and Project Assistants with at least a 33.33% appointment are eligible to receive tuition remission. Please note, students who receive tuition remission are still required to pay segregated fees by the tuition due date. The amount charged for segregated fees is based upon the number of credits the student has enrolled in. Tuition and segregated fees can be viewed and paid through the student center section of a student’s MyUW account.

Applying for Research Assistantships (RAs)

Prior to applying students should contact professors in their area of interest about open positions. Faculty review all graduate applicants when hiring new Research Assistants and make the decision on whom they will appoint. RA positions are renewable based on satisfactory progress and the availability of research funds. All BME students with an RA appointment will be compensated according to BME’s current stipend rates. Contact our Payroll and Benefits Specialist for current rates.

Applying for Teaching Assistantships (TAs)

Any MS Research student in the College of Engineering enrolled as a full-time student (8-15 credit load) may apply for a TA position in BME. First consideration will be given to BME graduate students. In selecting among applicants, the department will consider an applicant’s preparation and achievement in relevant subjects and their potential as effective teachers for UW undergraduates. Professors in the courses seeking TAs will review applications and select TAs for their courses.

Teaching Assistantship Expectations

First time TAs are required to attend the New Educators Orientation (NEO) that occurs at beginning of every semester. In addition, first time non-native, English-speaking TAs are required to take a SPEAK test to prove they possess the required level of oral English proficiency to qualify for a TA appointment.

All Teaching Assistants must attend the College of Engineering Teaching Improvement workshops held in August and January.

Teaching Assistants will receive student evaluations using the College of Engineering Teaching Evaluation Form. The department recommends supervising faculty evaluate inexperienced (first two semesters) TAs during the fifth or sixth week of their first two semesters. The evaluation will usually involve a planned visit to a classroom/lab section and a subsequent conference with the TA.

Applying for Project Assistantships (PAs)

There are a few project assistant opportunities across campus. Announcements of openings are posted on the UW Job Center.

For Project Assistantships in the department, please submit a resume to the main office. The process established for selecting TAs is also used for PAs; similarly, PAs carry the same credit requirements at TAs (full-time enrollment of 8-15 credits in fall and spring semesters).
Assistantship Opportunities

Health Insurance and Leave Benefits for Assistantships

Health Insurance
All UW–Madison students are eligible to receive health care at the University Health Service (UHS) as part of their tuition fees (excluding hospitalization and emergency room services). TAs, RAs, PAs, and fellows holding a minimum 33.33% appointment are eligible for enrollment in group health insurance through the university within the first 30 days of employment. The university will pay for most of the premium. To learn more about benefits and in order to activate insurance, students should see the department's new employee resource page and see the Payroll and Benefits Specialist.

Leave Benefits
RA appointment leave is covered by the Graduate School’s Academic Policies and Procedures - students are encouraged to discuss with their advisors how to document their leave. In addition, the following policies apply:

- University legal holidays are to be kept free of mandatory requirements.
- Consistent with UW policy, student religious observances are to be free of mandatory requirements.
- If necessary, a student may discuss the option for an extended leave of absence with their advisor and the Associate Chair of Graduate Advising.

Parental Leave
The College of Engineering (COE) is fully committed to providing a climate of support for those who choose to have children during their graduate studies. The goal of this COE parental leave policy is to reduce academic and financial hardships for a) female graduate students during the late stages of their pregnancy, childbirth, and postpartum periods, and b) any graduate student who is a new parent providing care for his/her infant.

All COE graduate students with current research, teaching, or project assistantships are eligible to request a parental leave under this policy. Upon request, expectant mothers will be provided with 12 weeks of paid accommodation time for childbirth. Other new parents (father, adoptive mother, adoptive father) will, upon request, be provided with 6 weeks of paid accommodation time. There will be no research or teaching expectations of the student during the leave. Students should ideally notify their department (through the Department Administrator or Department Chair) six months prior to the expected birth to request the leave. Expectant mother should alert their research advisor or TA coordinator at that time as well to ensure that the ongoing research and teaching environment is safe. It is recognized that each case will be unique in terms of the timing of the pregnancy or adoption relative to the academic calendar, and that creative and supportive solutions will be required on the part of advisors, chairs, TA coordinators, etc.

The leave will ordinarily begin at the time of birth, but other proposals will be considered. Departments–both advisors and chairs–are expected to provide flexibility in working out the details of the leave and to adjust the timeline of the leave as needed to accommodate any unexpected medical issues that arise during pregnancy (e.g. doctor-ordered bed rest). All academic requirement deadlines (e.g., qualifying exams) will be extended for the student requesting the leave, consistent with department academic timelines.
Quick Links: Student Resources

The links below are easy-to-access resources available to students through BME, the College of Engineering, and the university.

Calendars

**UW–Madison Academic Calendar**
Start and end dates, holidays, and exam dates for academic terms across campus.

**Enrollment Deadlines and Tuition Payment**
Information from the Office of the Registrar regarding when students can adjust their scheduled courses. For tuition due dates and payments, see the Bursar's Office.

**Degree and Dissertator Eligibility Deadlines**
List of dates students requesting final warrants and preparing for graduation should be aware of as they form their academic plans.

**Commencement**
The university's official site for all information concerning upcoming graduation ceremonies.

Campus and Academic Life

**UW–Madison Guide to Student Life**
The university's complete compilation of student resources and opportunities; including student organizations, diversity on campus, events, health and wellbeing, and life in Madison.

**Graduate Policies and Procedures**
The Graduate School's expectations for student conduct, academic achievement, and degree-earning efforts.

**International Student Services**
A resource for international students searching for programs in the Madison community and assistance related to visas and immigration.

Computers

**CAE (Computer Aided Engineering)**
The technology resource for computers and software specific to the College of Engineering campus.

**DoIT (Division of Information Technology)**
The university’s main provider of technological assistance, products, and education.
Quick Links: Student Resources

Department Resources

**BME Staff Directory**
The staff directory page for the department.

**College of Engineering Intranet**
An internal website with resources for students and employees, including links to department resources, travel reimbursements, employee benefits, meeting space reservations, and more.

Diversity

**Division of Diversity, Equity & Inclusion**
The university's office for the promotion, integration, and transfer of equity and diversity values to campus.

**Engineering Diversity Affairs Office**
The College of Engineering's local office for the promotion of equity and diversity.

Health and Wellness

**University Health Services**
The university's provider of student physical and mental health services and education.

**McBurney Disability Resource Center**
A resource for students who have a documented disability—or suspect that they may have an undiagnosed disability—to obtain academic accommodations.

Learning Resources and Assistance

**Engineering Career Services**
A college office offering assistance to students searching or preparing for internships, co-ops, and jobs.

**Steenbock Library**
The university's main library for engineering students. The engineering librarian team is located in room 118.

**Makerspace**
A student-run, rapid prototyping facility with a wide range of rapid prototyping equipment.

**Technical Education and Manufacturing (TEAM) Lab**
Provides UW engineering faculty, staff, and students with the majority of the tools and equipment found in a modern machine shop as well as a full wood lab, welding lab and sheet metal lab.

**The Writing Center**
Campus-wide organization that provides free of charge, face-to-face and online consultations for students writing papers, reports, resumes, and applications.