Graduate Student Handbook
PhD
2016-2017

Department of Biomedical Engineering

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**Location and Contact Information**

**Department Mailing Address**
Department of Biomedical Engineering  
University of Minnesota  
7-105 Nils Hasselmo Hall (NHH)  
312 Church St. SE  
Minneapolis, MN 55455

**Graduate Student Mailboxes**
Every full-time student on a paid assistantship or fellowship has a mailbox in the main BME office area on the 7th floor. It is your responsibility to check your mailbox regularly!

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**Google Apps, E-mail, and Wireless Accounts**

Through a partnership with Google, University of Minnesota students, faculty, and staff can access a suite of Google-powered communication and collaboration tools designed to enhance our ability to work together. The suite includes email, calendar, document sharing, instant messaging, and Web site publishing tools. See [http://it.umn.edu/email-services](http://it.umn.edu/email-services) for details.

E-mail is the University’s official means of communication with students, and the Office of Student Finance (OSF) uses e-mail as the means of sending tuition bills to all University of Minnesota-Twin Cities students. Those who primarily use a different e-mail account (e.g., hotmail, personal Gmail, etc.) are encouraged to forward their University-assigned e-mails to another preferred account. See [http://it.umn.edu/using-gmail](http://it.umn.edu/using-gmail) for more information. **Students are responsible for all information sent to their umn.edu email account, including attachments.**

Students who choose to use their personal computers on campus can find wireless network information and setup instructions at [http://it.umn.edu/wifi-network](http://it.umn.edu/wifi-network).
**Responsible Conduct of Research**

Program policy requires that all graduate students receive the equivalent of eight hours of instruction in Responsible Conduct of Research (RCR). All graduate students in BME are required to attend RCR instruction as follows:

- Complete online RCR training through the Collaborative IRB Training Initiative (CITI) by September 19, 2016 (instructions provided with orientation materials)
- Attend one Center for Bioethics Seminar each semester in which you take the BME Graduate Seminar (BME-8601/8602)

Contact the Graduate Program Coordinator (bmengp@umn.edu) with any questions about the Responsible Conduct of Research requirements.

**Lab Access, Safety Training**

Only authorized personnel who have completed the necessary training are granted access to lab areas, at the discretion of the advisor. All PhD students are required to complete the following basic lab safety training modules within the first month of their first semester in the program:

- Introduction to Research Safety
- Bloodborne Pathogens and Infectious Agents
- Chemical Safety
- Chemical Waste Management
- Radiation Safety

These online training modules are all accessible from the Department of Environmental Health and Safety website at [http://www.dehs.umn.edu/training_new_empl.htm](http://www.dehs.umn.edu/training_new_empl.htm). Students will be required to log in with their UMN internet ID and password to access each module and to have successful completion noted on their training records.

Additional training modules may be required for different lab facilities, so students should check with their advisors for a complete list of requirements in the event that lab access is necessary. Lab access will not be granted until after all required training modules are complete AND the advisor has submitted an access request to the appropriate building/facility management office.

After-hours building access to Nils Hasselmo Hall (NHH) is granted through use of the U-Card, which is your University of Minnesota identification card. If door keys are required, they must be requested by the lab’s PI and picked up from the NHH Info Desk on the 3rd floor.
**BME Graduate Student Intranet**

The Graduate Program Coordinator has developed a BME Graduate Student (BMEGS) Intranet through Google Sites at [https://sites.google.com/a/umn.edu/bme-grad-students/](https://sites.google.com/a/umn.edu/bme-grad-students/). All new and current students have been granted access to the Intranet. The site was designed to provide students with detailed, helpful information for each stage of their graduate careers. It includes an events/deadlines calendar, announcements, policies, advisor selection and degree planning tools, registration information, job and internship postings, forms, and more.

Students should bookmark the BMEGS Intranet site and check it frequently for updates!

**Advising Information**

**General Advising**
At the start of graduate study in the Biomedical Engineering Graduate Program (BMEGP), students will be able to consult as necessary with the Director of Graduate Studies (DGS) or with the Graduate Program Coordinator.

The DGS serves as the initial advisor for all incoming graduate students and can assist with course planning, advisor selection, etc.

The Graduate Program Coordinator can assist students with most administrative matters, such as Graduate School paperwork, departmental policies, BMEn course permission numbers, etc.

Links to Graduate Student Services and Progress (GSSP) and BME Department forms are available on the BMEGS Intranet at [https://sites.google.com/a/umn.edu/bme-grad-students/current/forms](https://sites.google.com/a/umn.edu/bme-grad-students/current/forms).

Students are responsible for keeping their *BME Graduate Program Handbook* until they have graduated from the program, since the handbook contains the particular degree requirements that pertain to each entering class. All editions of the handbook are made available on the BMEGS Intranet at [https://sites.google.com/a/umn.edu/bme-grad-students/current/handbooks](https://sites.google.com/a/umn.edu/bme-grad-students/current/handbooks).

Students are also responsible for knowing and adhering to the Graduate Education policies outlined in the University-wide Policy Library ([http://policy.umn.edu/education](http://policy.umn.edu/education)) and the relevant rules and procedures on One Stop ([http://onestop.umn.edu/](http://onestop.umn.edu/)).

**Choosing an Advisor**
All students must eventually identify a permanent advisor, who will guide advisees in choosing their remaining coursework, thesis research, and examination committees.
Part-Time Students
Because the time to degree completion for part-time PhD students varies so greatly, there is no set procedure or timeline for them to find a permanent advisor. Part-time/unsupported students should, however, have an advisor assigned by no later than one semester prior to initiating their preliminary examinations. Until that time, the DGS will continue to serve as the advisor.

Full-Time Students: Lab Rotations
Full-time supported students must identify a permanent advisor during the fall semester of the first year. In addition to providing academic and research advice, the advisor will also provide financial support for advisees from his/her research grants.

In order to facilitate the advisor selection process, the department requires that all full-time PhD students complete lab rotations with three different faculty members.

The lab rotation and advisor selection schedule for Fall 2016 follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fri 8/26-Wed 8/31</td>
<td>BME Orientation - students are provided with list of possible rotations and listen to faculty presentations</td>
</tr>
<tr>
<td>Fri 9/2</td>
<td>After faculty presentations are complete, students turn in first rotation preferences</td>
</tr>
<tr>
<td>Thu 9/8</td>
<td>First rotation is assigned and announced to faculty and students</td>
</tr>
<tr>
<td>Mon 9/12-Fri 9/30</td>
<td>Rotation 1 - Students turn in second rotation preferences</td>
</tr>
<tr>
<td>Thu 9/29</td>
<td>Second rotation is assigned and announced to faculty and students</td>
</tr>
<tr>
<td>Tue 9/27</td>
<td>Students turn in second rotation preferences</td>
</tr>
<tr>
<td>Thu 10/3-Fri 10/21</td>
<td>Rotation 2 - Third rotation is assigned and announced to faculty and students</td>
</tr>
<tr>
<td>Tue 10/18</td>
<td>Students turn in third rotation preferences</td>
</tr>
<tr>
<td>Thu 10/20</td>
<td>Third rotation is assigned and announced to faculty and students</td>
</tr>
<tr>
<td>Mon 10/24-Fri 11/11</td>
<td>Rotation 3 - Students rank advisor preferences</td>
</tr>
<tr>
<td>Fri 11/11</td>
<td>Student-Advisor pairings are announced; Research Assistantships begin in Spring 2017</td>
</tr>
</tbody>
</table>

In the event that a student is not matched with an advisor by the start of Spring 2017, the student will be supported on department funds (likely including a TA appointment) until an advisor is matched, but not beyond the end of the academic year. If the student has not found an advisor by the start of summer, this constitutes unsatisfactory progress and is grounds for termination from the program.

In the event that a student is paired with an advisor but then chooses to leave that lab, the department must be notified immediately, and there is no guarantee of any further financial support from the department at that time. It is the student’s responsibility to find a new advisor and funding source within the timeframe designated by the department. Failure to find a new advisor by the stipulated deadline constitutes unsatisfactory progress and is grounds for termination from the program.

New students who have at least two years of full support (fellowships or traineeships) are still required to complete the three lab rotations in their first semester, but they may submit their choices for advisor any time before May 15 of the first year. Students on traineeships should check with the stipulations of the training grant regarding the timing of advisor selection.
**Course Registration**


Registration for each semester begins approximately one month prior to the end of the previous term. Each student is required to register every fall and spring semester to maintain active graduate student status. Students must re-apply for admission to the Graduate School if their student status becomes inactive. For more information see the policy at [http://policy.umn.edu/education/maphdobjectives](http://policy.umn.edu/education/maphdobjectives).

The deadline for Fall 2016 registration is Monday, September 5, 2016 (the day before classes start). Students who are not yet registered for any credits after this date will be assessed a late fee upon initial registration.

**Holds**

Students must clear all registration holds each semester before they will be permitted to register. Students can monitor their holds in MyU by clicking on the Holds tab at the bottom of the page. Click the “more...” link for information about how to resolve/remove the hold. *Only the office/department that placed the hold will be able to update or clear it.*

**Course Numbering System**

The University of Minnesota uses a four-digit course numbering system. Graduate students must fulfill their course requirements by registering for courses at the 5000 and 8000 levels. In some cases (e.g., research-related coursework in a field/department that is outside the student’s previous experience), and with pre-approval of the advisor and DGS, a 4000-level course may be used toward degree course requirements. DGS pre-approval may be granted occasionally for a course at the 6000 or 7000 levels.

**Transferring Courses**

With approval from the DGS, courses may be transferred from other graduate institutions. A minimum of 12 course credits must be taken at the University of Minnesota. See [http://policy.umn.edu/Policies/Education/Education/GRADCREDITDEGREE.html](http://policy.umn.edu/Policies/Education/Education/GRADCREDITDEGREE.html) for transfer policy details.

Students interested in counting transfer credits toward their degree requirements should schedule an appointment to discuss transfer options with the DGS during the first semester in the program.

**Approvals/Permissions**

Registration for some courses may require approval in the form of a permission number. The BME Graduate Program Coordinator can only issue permission numbers for courses with the BMEn designator, and only with direct authorization of the instructor. Outside the BMEn designator, students must contact the department/instructor offering the course.
**Student Fees and Payment**

Students are responsible for paying all fees by the due dates defined on the original fee statement. Account statements are sent to each student’s University email address shortly after registration. Statements can be viewed and paid in MyU. Students who are financially supported by the department will typically have fall and spring tuition covered by their fellowships or graduate assistantships. *Various student services fees and related fees, however, are assessed to all students registered each semester and are not covered by any departmental funding.* Billing and payment information can be found online at [http://onestop.umn.edu/finances](http://onestop.umn.edu/finances).

**Graduate Education Policies and Requirements**

In addition to the program requirements listed on the following pages, students are responsible for knowing and adhering to the policies and procedures set forth by the Graduate School. The following resources will be of use to students:

- [http://www.grad.umn.edu/current-students-graduate-student-services-progress/doctoral](http://www.grad.umn.edu/current-students-graduate-student-services-progress/doctoral)
  Information for Current Doctoral Students - Includes links to forms, timelines, checklists, completion and graduation procedures, thesis submission guidelines, and other information that is essential for timely completion of the degree.

- [http://www.grad.umn.edu/about/policiesgovernance](http://www.grad.umn.edu/about/policiesgovernance)
  Graduate Student Education Policies - Provides links to and information on policies related to graduate education. Additional policies will be posted as they are approved.
Doctoral Degree Course Requirements

Degree Planning Tools - https://sites.google.com/a/umn.edu/bme-grad-students/current/degree-planning

Course Lists - https://sites.google.com/a/umn.edu/bme-grad-students/current/course-lists

The PhD requires completion of at least 30 credits of classroom work, which must include the following:

- **BMEn 8000-Level Core** - 6 credits selected from the BMEn 8000-Level Core list
- **BME Graduate Seminars** - 3 credits of BMEn 8601 and/or BMEn 8602 (seminars are 1 credit per semester and may be repeated for credit); another department/institute seminar may be substituted for 1 credit of this requirement, with prior approval from the DGS
- **Biology Electives** - 6 credits of coursework with a primarily biological emphasis
- **Technical Electives** - 9 credits of engineering/physical science/mathematics coursework offered in the College of Science and Engineering
- **Free Science/Technical Electives** - 6 credits of coursework in a field of science or engineering; up to 3 credits of coursework relevant to science and technology, such as public policy, ethical/historical aspects, etc., may be counted toward this requirement with prior approval from the DGS
- **Math-/Stat-Intensive** - INCLUDED in the Core, Technical, and/or Free coursework must be at least 6 credits that have been approved by the DGS as Math-/Stat-Intensive. These are *not* additional credits - they will overlap with other course requirements.

All core/elective courses must be at the 5000 level or higher, unless pre-approved by the DGS. Electives may include coursework that is also being counted toward an optional doctoral minor (see below).

**Directed Research**
With DGS approval, a PhD student may register for Directed Research (BMEn 8710). Students must submit the BMEn 8710 Directed Research Form (available from https://sites.google.com/a/umn.edu/bme-grad-students/current/forms) for approval before they will be allowed to register. The Directed Research project must be distinct from the student's thesis research. To ensure minimal overlap between the two projects, BMEn 8710 may be counted toward degree requirements only if the project is advised by someone other than the student's thesis advisor. A maximum of 3 credits of BMEn 8710 may be counted as Technical Electives with DGS approval, but they cannot be designated as Math-/Stat-Intensive.

**Completing a Doctoral Minor (optional)**
PhD students may complete a doctoral minor in another program if they wish. See the Graduate Education Catalog (http://www.catalogs.umn.edu/grad/) for more information about available minor programs and requirements.
Students are permitted to use elective coursework (Biology, Technical, and/or Free) toward both major and minor requirements when appropriate. The minor must be approved by the DGS of the program granting the minor. Students are advised to determine suitable courses for fulfillment of minor requirements early in their graduate careers. If a minor is successfully completed, it will be included on the student’s official transcript.

**Doctoral Preliminary Examinations**

**Dossier/Written Preliminary Examination**
The Written Preliminary Examination (WPE), also known as the dossier, is completed and submitted to the Graduate Program to assess the student’s ability to successfully complete a PhD thesis. See the *Satisfactory Progress* section for dossier submission deadlines.

Dossier formatting requirements are available from [https://sites.google.com/a/umn.edu/bme-grad-students/current/degree-planning](https://sites.google.com/a/umn.edu/bme-grad-students/current/degree-planning) > PhD > Preliminary Exams.

The advisor must approve the dossier before it is submitted to the committee for review. The student will identify two readers from his/her OPE committee (excluding the advisor/co-advisor) to evaluate the dossier. The DGS will choose a third reader from the BME Graduate Faculty who is not on the student’s committee.

The student will receive copies of the evaluation forms completed by the three readers and should discuss them with the advisor prior to the Oral Preliminary Examination (OPE). If the dossier is not given a passing grade, the student must meet with the advisor and dossier readers to identify deficiencies that can be resolved, or to consider whether studies should terminate with the MS degree.

Once the DGS confirms that a student has passed the WPE/dossier, the Graduate Program Coordinator will report the passing result to GSSP. GSSP will then update the student’s record to clear him/her to take the OPE.

**Oral Preliminary Examination**
Only after GSSP receives and processes the passing result of the WPE will a student be allowed to take the Oral Preliminary Examination (OPE). The OPE must be completed and passed before the student can register for thesis credits (BMEn 8888). See the *Satisfactory Progress* section for OPE pass deadlines.

It is the student's responsibility to schedule the OPE with the committee members and GSSP. The student must provide signed documentation to show that s/he has contacted the faculty listed as committee members, that the committee members hold appropriate Graduate Faculty appointments, and that they have agreed to serve on the OPE committee. The advisor typically chairs the committee.
Please keep in mind the following regulations regarding the OPE:

- Only OPE committee members may attend the examination.
- The examination begins with a presentation about the proposed research in order to establish the ability to formulate, describe, and conduct an original research project. Students should plan for their presentation to last no more than 30 minutes uninterrupted.
- The OPE determines whether the student has mastered the material in the major and minor (if a minor is declared) at the level the committee deems appropriate for advancement to doctoral candidacy. Thus, the examination is not restricted to a discussion of the research proposal, but will include questions related to coursework in the major/minor fields.
- The committee chair (advisor) is responsible for the conduct of the exam (i.e. ensuring that a line of questioning is appropriate and observing GSSP procedures).

Passing the OPE constitutes official candidacy for the PhD. There are no further examinations until the final defense of the doctoral thesis. Failing the OPE may result in a recommendation either to repeat the exam, or to terminate graduate studies with or without completion of the MS degree.

**Doctoral Thesis, Advanced Status, and Graduation**

**Thesis Credits**
The Graduate School requires doctoral students to complete 24 thesis credits in order to earn the degree. Only after passing the OPE is a student eligible to register for thesis credits. See the *Satisfactory Progress* section for thesis credit completion requirements.

**Advanced Doctoral Status**
Upon completion of all PhD coursework, preliminary examinations, and thesis credits, students are eligible for Advanced Doctoral Status. Full-time students typically enter Advanced Status at the start of their fourth year in the program. Students whose applications are approved by the advisor and DGS can maintain their full-time student status by registering for just one credit of BMEn 8444 (FTE: Doctoral). This registration category is intended only for advanced PhD students who have completed all their program coursework and required thesis credits, but are still working full-time on the research or writing of the thesis. These credits cannot be used to meet specific program course or thesis credit requirements. See [http://policy.umn.edu/sites/policy.umn.edu/files/forms/otr195.pdf](http://policy.umn.edu/sites/policy.umn.edu/files/forms/otr195.pdf) for the Advanced Doctoral Status Application. **Students must re-apply for Advanced Doctoral Status prior to each semester in which they intend to register for BMEn 8444.**

**Final Examination Committee**
At least one semester prior to the Final Examination/Thesis Defense, the student and advisor should identify and assign Final Examination Committee members. The final examination committee need not have the same faculty members as the preliminary examination committee, although for many students the two committees will be identical. Committee requirements are posted at [http://www.grad.umn.edu/current-students-graduate-student-services-progress-doctoral/doctoral-committees](http://www.grad.umn.edu/current-students-graduate-student-services-progress-doctoral/doctoral-committees).
It is the student’s responsibility to obtain confirmation from all committee members that they are able to serve in their designated capacities (chair, reviewer, etc.) before any official assignments are made! Once all members have confirmed, the student must assign the committee online by following the instructions at http://www.grad.umn.edu/current-students-graduate-student-services-progress-doctoral/assign-doc-final-committee.

**Thesis Defense/Final Examination**
Upon completion of the thesis, the PhD candidate must defend it in the Final Oral Examination. At least two weeks prior to the Defense/Final Examination, students must distribute a copy of the thesis to each committee member for review. All designated thesis reviewers must certify that the thesis is ready for defense before the final examination may take place.

At least one week prior to the exam, the student must officially schedule it with the Graduate School using the online form at http://www.grad.umn.edu/graduate-student-services-progress/final-schedule. The Final Oral Examination consists of a public seminar in which the candidate presents the thesis, and to which the scholarly community is invited. (The student should provide a title, abstract, time, and location to the BME Graduate Program Coordinator to announce the defense at least one week in advance.) A closed meeting between the candidate and the appointed examining committee immediately follows the thesis presentation. The candidate is then excused, and a vote is taken. The Final Oral Examination is limited to the thesis and relevant subject areas.

The advisor is responsible for ensuring the inclusion of appropriate modifications and required revisions, if any, in the final thesis. The Final Oral Examination Report will not be signed and submitted to GSSP until all revisions have been made.

**Electronic Thesis Submission**
The doctoral thesis must be submitted online. Complete formatting and submission instructions are available at http://www.grad.umn.edu/current-students-graduate-student-services-progress/thesis-submission.

The thesis must be a well-written manuscript that is free from error and ready in its final version before submission to GSSP. Any revisions required after the final defense by the examination committee must be made and approved by the advisor (as confirmed by the advisor’s signature on the signature page) prior to submission to GSSP. **Changes cannot be made to the thesis once accepted by GSSP.**

**Graduation and Commencement**
Graduate degrees are awarded on the last working day of the month in which the candidate completes all requirements. The degree award will appear on the candidate's transcript approximately 3 weeks following the official conferral date. Diplomas are mailed within 4-6 weeks of the official conferral date.

The Arts, Sciences, and Engineering Graduate Commencement is held each spring. Students wishing to participate in the commencement ceremony must apply to do so by the posted deadlines. See [http://gradcommencement.umn.edu/](http://gradcommencement.umn.edu/) for information, eligibility requirements,
cap and gown information, and additional details. BME does not have program-specific eligibility requirements for participation in the commencement ceremony.

**Satisfactory Progress**

The Biomedical Engineering Graduate Program requires a minimum grade of B- for any course to be counted toward the PhD. Non-seminar/-internship classes taken S-N may be included on the degree plan only if the student provides written confirmation from the instructor that the grade would have been at least a B- on the A-F scale. In addition, the overall GPA of degree coursework must be at least 3.0.

PhD candidates must submit a first-author manuscript to a peer-reviewed journal before completion of the program. Evidence of submission must be provided to the DGS.

All BME students are required to demonstrate their satisfactory progress by completing the Annual Progress Report (APR), which will be distributed by the BME Graduate Program Coordinator each summer. The student’s advisor must review the APR, evaluate the student’s progress, and discuss the APR with the student. After the advisor and student sign the form, it must be submitted to the program office for review by the DGS.

It is crucial that all PhD students frequently consult the Degree Planning section of the BMEGS Intranet (https://sites.google.com/a/umn.edu/bme-grad-students/current/degree-planning), paying special attention to deadlines in order to ensure timely completion of the degree.

In addition to these general requirements, students must also meet the satisfactory progress requirements specific to their student status, as indicated in the following sections.

*Failure to meet the requirements for satisfactory progress as described in this document is grounds for dismissal from the program.*

**Full-Time Students**

As part of what constitutes satisfactory progress, a full-time PhD student with a 50% RA appointment is expected to complete the degree within 5 years. This timeframe typically requires 50+ hours per week devoted to coursework and/or research. If a student holds an appointment as a Teaching Assistant, time spent performing TA duties will be considered part of the 50+ hours per week.

In addition to the above stipulations, progress toward the PhD degree is deemed satisfactory if the student

1. registers for at least 10 credits in the first semester of study;
2. submits the WPE/dossier by July 15 (or the next business day, if July 15 is on a weekend) between the 2nd and 3rd years in the program (students who fail to submit the dossier by this deadline will face serious consequences, including possible removal from the program);
3. passes the WPE and successfully completes the OPE by the drop/add deadline of the fifth semester in the program (Fall of the 3rd year);
4. completes all 24 required thesis credits (BMEn 8888) by the end of the sixth semester (3rd year) in the program; and
5. holds Advanced Doctoral Status beginning in the 7th semester (4th year) of the program.

After that point, satisfactory progress is determined by the faculty advisor, who will inform the student and the DGS if there are any problems.

Full-time students are required to meet with the doctoral committee at least once each year, beginning with the second year of residence in the program. Meeting with the committee for the OPE and final thesis defense constitutes two of the required meetings. During each intervening year, the student must schedule a meeting with the committee, and the advisor must provide the DGS a summary of the sentiment of the committee regarding the student’s progress, indicating the date the meeting occurred, and the committee members in attendance. See https://sites.google.com/a/umn.edu/bme-grad-students/current/forms for the Annual Committee Meeting Form and Guidelines.

All PhD students must graduate within 8 years from initial enrollment, per University policy (http://policy.umn.edu/education/doctoralperformance, Section III-b).

**Part-Time Students**

Part-time students in the PhD program must take 3-6 credits per fall and spring semester in order to make satisfactory progress. Students who plan to take fewer than 3 credits in a given semester should contact the Graduate Program Coordinator at least two weeks before the semester begins. All coursework should be completed within 4 years.

After coursework is completed, satisfactory progress is largely determined by the faculty advisor. The student must, however,

1. initiate thesis research by the end of the 4th year in the program;
2. pass the WPE and OPE by the end of the 5th year in the program; and
3. complete all 24 required thesis credits (BMEn 8888); defend and submit the thesis; and graduate within 8 years from initial enrollment in the program.

All PhD students must graduate within 8 years from initial enrollment, per University policy (http://policy.umn.edu/education/doctoralperformance, Section III-b).
Graduate Fellowships, Assistantships, and Financial Support

Please note that this section applies only to students who were offered financial support from the department in their letters of admission.

All students holding graduate assistant/fellowship positions at the University of Minnesota should be familiar with the policies governing graduate student employment as outlined by the Office of Human Resources at http://humanresources.umn.edu/find-job/graduate-assistant-jobs. Any questions about payroll, health benefits, or tuition benefits should be directed to the BME Payroll Coordinator at bmepayhr@umn.edu.

Financial support for students in Biomedical Engineering is broken down into three categories: Fellowships, Research Assistantships, and Teaching Assistantships.

Fellowships
Until the date student-advisor pairings are announced, full-time students without their own non-departmental financial support awards will be paid with fellowship funds provided by the department. These are service-free fellowships that come with no obligation other than to be registered for a full course load (10-14 credits, as advised by the DGS) and to submit advisor choices by the deadlines outlined above. Failure to complete at least 10 credits during the fall semester of the first year, unless pre-approved by the DGS, constitutes failure to make satisfactory progress and may result in the termination of support.

Research Assistantships
Once each student is paired with an advisor, s/he will be paid almost entirely from the advisor’s research grant(s) as a Research Assistant (RA). This is a service-based assistantship requiring students to perform research related to the advisor’s grant-funded projects while also completing coursework for the degree.

Teaching Assistantships
At least once every four semesters, supported full-time students are required to serve as Teaching Assistants (TAs). Depending on the TA assignment, students will be expected to spend an average of 7-27 hours per week on instruction-related duties.

Normally students do not serve as TAs until their second year of graduate work (it is rare but possible to be assigned a TA-ship during the spring of the first year). At the beginning of summer, students are asked to indicate the course(s) for which they would like to TA during the next academic year. Final TA appointments are assigned by the Department Head. An attempt is made to balance the TA service among all students during their residence, within the constraints created by certain fellowships and traineeships. Students on external fellowships and traineeships that do not permit teaching assistantships should discuss their individual cases with the DGS.
International Students: English Language Proficiency for Teaching Assistants

University policy states, “All nonnative English speaking graduate and undergraduate Teaching Assistants (TAs) will demonstrate proficiency in spoken English appropriate to the demands of their teaching assistantship.” (http://policy.umn.edu/hr/language)

To serve as a BME TA, students must achieve an English Language Proficiency (ELP) rating of ‘1.’ Those who get a lower score will be required to enroll in supplemental English language skills coursework until they get the required score. (Students must cover their own tuition for English skills coursework if registration for those credits will delay completion of program requirements and progression to Advanced Status beyond the timeline stipulated in the Satisfactory Progress section of this handbook.) For more information on ELP testing, see http://cei.umn.edu/courses-programs/international-teaching-assistant-program/testing-eligibility, or contact the Center for Educational Innovation (612-625-3041; teachlrn@umn.edu).

Those who do not fulfill the departmental requirements for TA eligibility jeopardize their continued graduate assistantship funding, so achieving the necessary ELP rating is extremely important.

Compensation
The first paycheck of the fall semester will be issued September 14, 2016, and will be for one week of pay only. After that, paychecks will be issued every other Wednesday and will be for two weeks of pay. The pay period/pay day schedule is available online at http://humanresources.umn.edu/pay-and-taxes/pay-calendars. Students should complete a Direct Deposit Authorization Form to have their pay deposited directly into a bank account. Direct Deposit authorization and online pay statements can be accessed in MyU > My Pay.

Health Benefits
All new and continuing students holding a University of Minnesota fellowship or at least a 25% graduate assistantship are eligible for coverage on the Graduate Assistant Health Plan. See https://shb.umn.edu/health-plans/gahp-home for details. Submit the Enrollment Form, available from https://shb.umn.edu/graduate-assistants/gahp-enrollment, as soon as possible to the Graduate Program Coordinator (bmengp@umn.edu, 7-104 Hasselmo Hall). The deadline to submit an enrollment form for fall semester coverage for most students is Tuesday, September 13, 2016. All graduate assistants who are enrolled in the GA Health Plan will be charged a fee on their student account at the start of each fall and spring semester.

The University will contribute to the summer premium for graduate assistants who were enrolled in the plan during the spring semester, unless they fill out a Change or Cancellation of Coverage form (https://shb.umn.edu/graduate-assistants/gahp-coverage-changes). All BME graduate students are required to pay their portion of the graduate assistant health care plan premium costs.

Complete information regarding the graduate assistant health plan and dental coverage is available at https://shb.umn.edu/health-plans/gahp-home. For information regarding
enrollment, eligibility requirements, or general questions, contact the Office of Student Health Benefits (Boynton Health, 410 Church St SE, 612-624-0627, umgahbo@umn.edu).

Should a student suffer an injury while performing duties as a graduate assistant, s/he must notify the supervisor as soon as physically possible following the injury. The supervisor will assess the situation, assist with arranging proper medical care, and begin the injury reporting process. Further information on the U’s Workers Compensation policy is available at http://policy.umn.edu/hr/workerscomp.

Full-Time Status for Graduate Assistants/Fellows
Students who hold graduate assistantships/fellowships must be registered as full-time students during each fall and spring semester in order to maintain their eligibility, tuition benefits, health benefits, etc. The registration requirements for maintaining full-time student status in BME are as follows:

Fall/Spring
Before they have completed their thesis credits, students must register for 6-14 credits each fall and spring semester. The graduate assistant tuition benefit is capped at 14 credits per semester, so those who register for more than 14 credits will be responsible for paying the additional tuition themselves.

After finishing all required course and thesis credits, students are eligible for Advanced Doctoral Status (BMEn 8444). Those approved for Advanced Status need only register for 1 credit of BMEn 8444 each fall and spring in order to be considered full-time students. Additional information on Advanced Status is located in the Doctoral Thesis, Advanced Status, and Graduation section of this handbook.

Summer
Students who are supported on graduate assistantships or fellowships SHOULD NOT register for any summer credits without the explicit, written instruction of the Director of Graduate Studies or the Graduate Program Coordinator. Students do not need to register for any credits over the summer in order to remain eligible for financial support; their assistantships, health benefits, wages, etc., will continue through the summer. Those who do register for summer classes will need to pay for those credits themselves—the department does not cover summer tuition. There are exceptions, but a student (or advisor) who has questions about summer tuition should contact the Graduate Program Coordinator before registering!

Ending a TA/RA Appointment
Students who end their graduate assistant appointments in the middle of the semester for any reason other than graduation may be responsible for a portion of their tuition and/or health insurance coverage. Advisors may choose to cover these charges, but they are not required to do so. Students should be sure to discuss their graduation and appointment termination plans with their advisors well in advance. Questions about the impact of mid-semester graduation and/or appointment termination on student benefits may be directed to the Graduate Program Coordinator.