

# Graduate Handbook

## Biomedical Engineering: MS

Last Revised March 14, 2024

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The purpose of the MS-only program is to produce graduates who will fill positions in research and development in the field of biomedical engineering or pursue further formal education. Graduates may expect to seek employment on the research staffs of engineering schools, medical schools, hospitals, industrial firms, and government laboratories.

We have three different Master's programs, all of which lead to an MS. Switching between these programs, once started, requires approval of the Director of the MS Program.

- (i) Master's degree without thesis
- (ii) Master's degree with thesis
- (iii) A combined BS/MS program with or without Master's thesis

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## Contact Information and Personnel

**Email:** DMS\_BME@northwestern.edu

### **Director of the MS Program**

Casey Ankeny, PhD

[casey.ankeney@northwestern.edu](mailto:casey.ankeney@northwestern.edu)

847-467-7435

### **Graduate Program Assistant**

Sarah Hamilton

[sarah.hamilton@northwestern.edu](mailto:sarah.hamilton@northwestern.edu)

847-491-4370

## Degree Requirements

We have three different Master's programs, all of which lead to an MS. Switching between these programs, once started, requires approval of the Director of the MS Program.

- Master's degree without thesis
- Master's degree with thesis
- A combined BS/MS program with or without Master's thesis

Completion of the Master's degree program may take as little as three quarters if done without a thesis. With a thesis, a typical time for completion would be two years. Thesis students qualify for enrollment of TGS\_512 after completing coursework; this offers full-time status for \$100 per quarter. Please see <http://www.tgs.northwestern.edu/about/policies/general-registration-policies.html> for more information about TGS\_512.

Graduate programs are administered by The Graduate School, so there are both The Graduate School and Biomedical Engineering Department requirements to satisfy for the degree. The detailed requirements of The Graduate School include but may not be limited to:

- Nine quality letter-graded (ABC, not P/NP) courses.
- A grade average for all work presented for the degree of at least B(3.0).
- All courses taken for graduate credit must be listed in The Graduate School course career (e.g., if a course is cross-listed as BMD\_ENG 395 and BMD\_ENG 495, an MS student must take BMD\_ENG 495 to meet degree requirements).

## MS Degree without Thesis

The requirements for the degree of Master of Science (without thesis) are as follows:

1. Completion of at least twelve 300-level or higher graduate courses (but no more than two units of 499; only 1 unit of 499 may be taken for credit in one term). Students must take the 495 version of all 395/495 combined courses. These courses must include a core curriculum of:
  - At least two of the following courses: BMD\_ENG 301, 302, 303. Previous credit can be established for these courses by filing a petition approved by the Director of the MS Program, but if so, they must be replaced with other advanced life science courses. To successfully petition out of a physiology course, the student must have taken a rigorous, quantitative course covering the same topical area. Students must submit the [petition form](#), syllabus of the similar course, and their transcripts to the Director of the MS Program when the Plan of Study is initially reviewed (during the fall quarter of the first year).
  - One advanced statistics course from the pre-approved list or other courses approved by the Director of the MS Program. If the student has not taken a basic statistics course, the student must complete a basic statistics course such as STAT 330-1 or IEMS 303 prior to taking the advanced statistics course. The basic statistics course will count towards the student's restricted electives. A list of approved advanced statistics courses may be found on the [MS Program website](#).
  - Two math or quantitative engineering and science courses from the pre-approved list or other courses approved by the Director of the MS Program. These courses should have a significant mathematical component (e.g., math-intensive problem sets, etc.). Note that students should review course syllabi to avoid repeating courses like those taken at another institution. A list of approved quantitative engineering and science courses may be found on the [MS Program website](#).
  - Of the remaining courses, at least five must be engineering or science courses that complement other coursework. Courses in the following areas may not count: research for credit (BMD\_ENG 499), global health (except BMD\_ENG 380), business, design, NUvention (except for one quarter of NUvention Medical), seminar, or survey courses. To clarify, NUvention Medical is a two-quarter sequence where one quarter may count as an engineering course. The second quarter would fulfill a restricted elective. BMD\_ENG 380 will count as an engineering course.
  - Seven of the twelve courses taken must be engineering courses. Courses focused on business, design, global health (except BMD\_ENG 380), research for credit (BMD\_ENG 499), or survey courses will not count towards these seven courses. With respect to BMD\_ENG 499, students must determine expectations from their advisor at the beginning of the quarter and turn in deliverables prior to the grading deadline.
2. All students are required to complete BMD\_ENG 512 in the fall, winter, and spring quarters of their first year. Upon petition to the Graduate Committee, a student may be exempt from one quarter of BMD\_ENG 512 if the student is enrolled in a class that meets in conflict with BMD\_ENG 512. Exemption will require the student to complete additional work related to the topics covered during the class.
3. A student can satisfy The Graduate School requirement for a comprehensive final exam in one of two ways: 1) completion of a project (a minimum of one BMD\_ENG 499) that includes a written report (length 25 pages or more) approved by a faculty member in the BME department, or 2) completion

of three classes with significant project components from a list posted on the [MS Program website](#). Courses not listed will be reviewed on an individual basis. Significant project components include, but are not limited to, a 10-page paper, slides from a 20-min presentation, etc.

4. Students are required to submit a Plan of Study, consistent with the above guidelines, no later than the end of the first week of the first quarter. This plan must be approved by the academic advisor. Note that this is just an initial plan; appropriate changes can be made with approval of the advisor and the Director of the MS Program. Failure to submit the plan on time or to follow the approved plan may lead to a delay in graduation.
5. All first-year students engaging in research are required to take Responsible Conduct of Research Training (RCR) through CITI.

## Timeline for MS Degree without Thesis

### **Fall Quarter**

**September** – Review your anticipated degree path through the Graduate Student Tracking System (GSTS; [gsts.northwestern.edu](https://gsts.northwestern.edu)). Email [DMS\\_BME@northwestern.edu](mailto:DMS_BME@northwestern.edu) to make appropriate changes.

**September** – Submit initial Plan of Study through GSTS. Submit petitions (found on the [MS Program website](#) under “Curriculum”) and associated paperwork to the Director of the MS Program for approval prior to approval of the Plan of Study. Signed petitions must be uploaded to GSTS under the “Documents” section.

**End of Quarter** – Upload project deliverables to GSTS prior to receiving your grades.

### **Winter Quarter**

**Week 5** – Indicate intent to graduate to the Director of the MS Program and Graduate Program Assistant by emailing [DMS\\_BME@northwestern.edu](mailto:DMS_BME@northwestern.edu).

**End of Quarter** – Upload project deliverables to GSTS prior to receiving your grades.

### **Spring Quarter**

**By One Week Prior to Deadline on Academic Calendar** – Complete Application for Degree (AFD) through GSTS if you believe you may graduate that quarter. If you later decide to change your graduation term, please withdraw your Application for Degree and refile for the desired term.

**By One Week Prior to Deadline on Academic Calendar** – Complete Master’s Completion Form and upload deliverables for project courses to GSTS under “Documents”.

Academic Calendar: <https://www.registrar.northwestern.edu/calendars/academic-calendars/>

## MS Degree with Thesis

The requirements for the degree of Master of Science (with thesis) are as follows:

1. Completion of at least nine 300-level or higher graduate courses (but no more than 1 unit of 499). All courses must be for a letter grade and part of The Graduate School course career. Students must take the 495 version of all 395/495 combined courses. These courses must include a core curriculum of:
  - At least two of the following courses: BMD\_ENG 301, 302, 303. Previous credit can be established for these courses by filing a petition approved by the Director of the MS Program but, if so, they must be replaced with other advanced life science courses. To successfully petition out of a physiology course, the student must have taken a similarly rigorous quantitative course covering the same topical area. The student must submit the petition form, syllabus of the similar course, and their transcript to the Director of the MS Program when the Plan of Study is initially reviewed (during the first fall quarter).
  - One advanced statistics course from the following list or approved by the Director of the MS Program. If the student has not taken a basic statistics course, the student must complete a basic statistics course such as STAT 330-1 or IEMS 303. The basic statistics course will count towards the student's restricted electives. A list of approved advanced statistics courses may be found on the [MS Program website](#).
  - Two math or quantitative engineering and science courses from the following list or approved by the Director of the MS Program. These courses should have a significant mathematical component (e.g., math-intensive problem sets, etc.) Note that students should review course syllabi to avoid repeating courses like those taken at another institution. A list of approved quantitative engineering and science courses may be found on the [MS Program website](#).
  - Of the remaining courses, at least three must be engineering or science courses that complement other coursework. Courses in the following areas may not count: research for credit (BMD\_ENG 499), global health (except BMD\_ENG 380), business, design, NUvention (except for one quarter of NUvention Medical), seminar, or survey courses. To clarify, NUvention Medical is a two-quarter sequence where one quarter may count as an engineering course. The second quarter would fulfill a restricted elective. BMD\_ENG 380 will count as an engineering course.
  - The remaining course may be any graduate level course that complements the student's coursework, including NUvention, research for credit, global health, business, and design courses. This "restricted elective" course must be approved by the Director of the MS Program before enrolling and must be part of The Graduate School course career. Thesis students are not eligible to count Kellogg courses towards their degree as they are not part of The Graduate School.
  - Five of the nine courses taken must be engineering courses. Courses focused on business, design, global health (except BMD\_ENG 380), research for credit (BMD\_ENG 499), or survey courses will not count towards these five courses. With respect to BMD\_ENG 499, students must determine expectations from their advisor at the beginning of the quarter and turn in deliverables prior to grades.
2. All students are required to complete BMD\_ENG 512 in the fall, winter, and spring quarters of their first year. Upon petition to the Graduate Committee, a student may be exempt from one quarter of BMD\_ENG 512 if the student is enrolled in a class that meets in conflict with BMD\_ENG 512. Exemption will require the student to complete additional work related to class topics.
3. Students are required to submit a Plan of Study, consistent with the above guidelines, no later than

the end of the first week of the first quarter. This plan must be approved by the academic advisor. Note that this is just an initial plan; appropriate changes can be made with approval of the advisor and the Graduate Program Chair. Failure to submit the plan on time or to follow the approved plan may lead to a delayed graduation.

4. All first-year students engaging in research are required to take Responsible Conduct of Research (RCR) Training through CITI.
5. MS thesis students work with their advisors to form an examination committee which consists of at least three faculty members with one, including the Chair, from core faculty from the department; a minimum of two, including the Chair, from The Graduate School faculty; and a minimum of two who are full-time members of the Northwestern faculty. All committees must be approved by the department during the spring quarter of the first year through the Graduate Student Tracking System (gsts.northwestern.edu). If a student selects a research advisor who does not have an appointment in the Biomedical Engineering Department, it is incumbent upon the student to select a faculty member within the core faculty of the department who will chair the examination committee.
6. MS thesis students must meet and confer regularly with the committee chair regarding coursework and research progress. Students must submit a signed copy of their committee update slides to GSTS no later than halfway through the quarter before the quarter the student wishes to graduate.
7. Both proof of a successful defense and approved thesis document are required for graduation. An acceptable dissertation resulting from original research must conform to [requirements](#) set forth in by TGS. All committee members and the Director of the MS Program must receive a copy of the thesis at least one week prior to the defense date.

Alternatively, a submitted (but not necessarily approved) first-author publication will suffice. Evidence of submission is required. The following documents must be uploaded to GSTS one week prior to TGS's Master's Completion Form deadline outlined on Northwestern's academic calendar: 1) the approved dissertation document or submitted, first-author paper and 2) the [Thesis Approval Form](#). Please note that the spring deadline for the Master's Completion form is in May due to the number of graduates.

8. Please note that transitions from the MS program to the PhD program are very rare. The application for transfer is only open to students in the MS with thesis option, and only students who have already entered the second year of study will be considered. Interested students must have a MS GPA greater than 3.5 to be considered, though a GPA of 3.5 does not guarantee admission. Please submit the following with your application by December 15 of the second year:
  - Three new recommendation letters. These should not be the letters that you submitted with your MS application. One letter should be from the faculty member who will serve as your advisor and must include a commitment to provide full funding for the duration of the PhD. Transfer students are not eligible for departmental fellowships.
  - Statement of research that you plan to do in the PhD program (one page max)
  - Northwestern University transcript.
  - Plan of Study for all remaining courses relevant to the PhD.

In addition, please have your advisor send a letter of support with commitment of funding for your PhD career to the BME Director of Graduate Admissions. This can be sent care of nu-bme@northwestern.edu, but request that this be forwarded to the Director of Graduate Admissions. Also, please conduct your MS thesis committee update by February 15 of the second year to evaluate research process.



## Selecting an Advisor

Those students participating in research are encouraged to consider possible areas of specialization before arriving on campus and to communicate directly with faculty members whose research interests match theirs. Research interests and phone numbers of faculty are given on [our home page](#). Further, a mentor matching event is held in the fall to facilitate pairing of thesis students with advisors. MS projects are solicited from advisors and distributed to students prior to the mentor matching event. Meetings during the mentor matching event are made based on student project preference. Students should select their advisor halfway through the second quarter. Those students who do not have an advisor by spring quarter of their first year must switch to the non-thesis MS program. Please see the Satisfactory Academic Progress section for more information.

### **Mentor/Mentee Agreement**

Students must meet with their advisors to complete the [MS Mentor/Mentee Agreement](#) during the quarter they match. Instructions for completing and submitting the agreement may be found at the top of the document.

## Committee Formation

Committees must be comprised of three members that meet the following requirements:

- Two committee members must be part of The Graduate School (typically tenure-track faculty).
- Two committee members must be full-time Northwestern faculty.
- The committee Chair must be [core BME faculty](#) and part of The Graduate School. If your primary research advisor is not part of the core BME faculty, please designate a core faculty member who is part of The Graduate School as your Chair for administrative purposes and have your research advisor listed as Co-Chair.

Please list your advisor and committee GSTS. Please send invitations to join the committee through GSTS. Once your committee members have accepted your invitation, please mark your committee as “complete” on GSTS and the Director of MS Program will review. Please have an approved committee by the spring quarter of the first year in the program. Any changes to the committee must be approved by the research advisor and implemented in GSTS.

## Holding a Committee Update

Committee meetings must take place halfway through the quarter before the quarter during which the student wishes to graduate (i.e., halfway through winter quarter for a spring graduation).

At the committee meeting, the student will typically present an introduction, 2-4 data slides, and future work with an expected timeline for completion. Committee members must sign a PDF version of the student’s slides and the student must upload this document to GSTS.

## Holding the Defense

Students must coordinate a time for all three committee members to attend the thesis defense presentation. The completed thesis or submitted first-author journal article must be emailed to the student’s committee at least one week in advance of the defense with the Director of the MS Program ([casey.ankeny@northwestern.edu](mailto:casey.ankeny@northwestern.edu)) cc’ed. The defense must be completed successfully and the thesis approved or first-author journal article submitted (with proof of submission) prior to submitting the Master’s Completion Form. The departmental deadline for the Master’s Completion Form is one week prior to the TGS deadline listed on the [academic calendar](#). Upon successful completion of the defense, students must have their committee sign the [Thesis Approval Form](#), which should then be uploaded to GSTS.

## Thesis/Dissertation Requirements

Upon written recommendation from the thesis committee and following a thesis committee meeting, a final thesis defense can be scheduled. All thesis committee members and the Director of the MS Program must receive a copy of the thesis at least one week prior to the defense. Failure to do so may result in the postponement of graduation. The thesis defense is open to all members of the Northwestern community and their guests.

An acceptable dissertation resulting from original research must conform to requirements set forth [here](#). All edits must be made in order for the Master's Completion Form can be approved. If edits are not completed by the internal Master's Completion deadline, graduation will be postponed.

## Timeline for MS Degree with Thesis

### Fall Quarter (Year 1)

- **Throughout** – Find an advisor.
- **September** – Review your anticipated degree path on GSTS and email [DMS\\_BME@northwestern.edu](mailto:DMS_BME@northwestern.edu) with any changes.
- **September** – Submit an initial Plan of Study through GSTS. Submit petitions (found on the MS Program webpage under “Curriculum”) and associated paperwork to the Director of the MS Program for approval prior to the approval of the Plan of Study. Signed petitions must be uploaded to GSTS under the “Documents” section.

### Winter Quarter (Year 1)

- **Week 5** – Indicate the advisor on GSTS.

### Spring Quarter (Year 1)

- **Beginning of Quarter** – Begin research.
- **Week 5** – Submit the committee to GSTS.

### Summer Quarter (Year 1)

- **Throughout** – Perform research.

### Fall Quarter (Year 2)

- **Throughout** – Perform research.

### Winter Quarter (Year 2)

- **Week 5** – Conduct the committee update, upload the signed slides to GSTS, and email the Director of the MS Program and the Graduate Program Assistant ([DMS\\_BME@northwestern.edu](mailto:DMS_BME@northwestern.edu)) about the intent to graduate.

### Spring Quarter (Year 2)

- **One Week Prior to the Deadline on Academic Calendar** – Complete Application for Degree by one week prior to the deadline on Northwestern's academic calendar through GSTS. If you later decide to change your graduation term, please withdraw your Application for Degree and refile for the desired term.



- **Throughout** – Perform research.
- **Before Submitting Master’s Completion Form** – Complete the [Thesis Approval Form](#) indicating a successful defense and approved thesis. Upload the Thesis Approval Form, approved thesis, and defense slides to GSTS.
- **At Least One Week Prior to TGS’ Master’s Completion Form Deadline on Academic Calendar** – Complete the Master’s Completion Form through GSTS for departmental review.

## The Combined BS/MS Degree for Northwestern Undergraduates

There are two programs that offer combined BS/MS degrees to Northwestern undergraduates. Details of the requirements for the undergraduate degree and the determination of which courses count for undergraduate study and which courses for graduate study are determined by the McCormick Undergraduate Engineering Office, BME, and The Graduate School.

The first program is available to all students in McCormick. Students must have fewer than four courses remaining in their BS to apply. Also, students must have a GPA >3.0; however, a GPA of 3.0 does not guarantee admission.

Students entering this program may complete the course-based MS or the MS with thesis. The complete course-based program can be completed in four or five years, although five years is recommended. The graduate requirements for the thesis and non-thesis BS/MS programs are the same as detailed above with the following side note:

- Northwestern University students completing their BS in Biomedical Engineering do not need to take the Physiology (BME\_ENG 301, 302, and 303) sequence as these were completed during the BS. Instead, they must take advanced life sciences courses approved by the Director of the MS Program.

The second program, as outlined in the section below, is an accelerated, thesis-based program for outstanding Biomedical Engineering undergraduates who have established research relationships with BME faculty members.

- Admission requirements (no exceptions):
  - 3.5 grade point average or higher in undergraduate studies.
  - Have conducted at least two quarters of undergraduate research (399 or paid research) with chosen advisor.
  - Approval by Director of the MS Program.

## Accelerated BS/MS Degree with Thesis

The graduate requirements for the Accelerated BS/MS programs (with thesis) are as follows:

1. Completion of at least six 300 or 400-level graduate courses for a letter grade (i.e., P/N courses are not accepted) and none of these courses can be a 499 (research credit). Students must take the 495 version of all 395/495 combined courses. The student must also take three units of BMD\_ENG 499. No more than three courses can be taken during the last year of study, and preferably only one or two courses will be taken. This is to allow a focus on completion of research during the final year. These courses must include a curriculum of:
  - a. One advanced statistics course. Note that students should review course syllabi to avoid repeating courses like those taken at the undergraduate level.
  - b. Two quantitative science and engineering courses as outlined above.
  - c. Of the remaining courses, at least two must be engineering or science courses that complement other coursework. Courses in the following areas may not count: global

- health (except BMD\_ENG 380), business, design, seminar, NUvention (except one quarter of NUvention Medical) or survey courses. NUvention Medical is a two-quarter sequence where one quarter may count as an engineering course. The second quarter would fulfill a course in a restricted elective.
- d. The remaining course may be any graduate level course that complements the student's coursework and research including global health, business, and design courses. This "restricted elective" course must be approved by the Director of the MS Program before enrolling and must be part of the Graduate School course career. Accelerated BS/MS with thesis students are not allowed to count Kellogg courses towards their degree requirements as they are not part of The Graduate School course career.
2. All students performing research are required to take Responsible Conduct of Research Training (RCR) within their first year in the MS portion of the program.
  3. All students are required to complete three quarters of BMD\_ENG 512. Upon petition to the Graduate Committee, a student may be exempt from one quarter of BMD\_ENG 512 if the student is enrolled in a class that meets in conflict with BMD\_ENG 512. Exemption will require the student to complete additional work related to the topics covered during the class.
  4. Students must determine the appropriate deliverables for each BMD\_ENG 499 course with their advisor at the start of the quarter enrolled. The deliverables must be submitted prior to the grade being awarded.
  5. Students are required to complete and defend a Master's thesis to satisfy the requirement for a comprehensive exam. An examination committee for an MS thesis consists of at least three faculty members with one, including the Chair, from the department's core faculty; a minimum of two, including the Chair, from The Graduate School faculty; and a minimum of two who are full-time members of the Northwestern faculty. Committee formation and update meetings should be held at least the quarter before the graduation quarter. The committee must sign a copy of the committee update slides and the student should upload them to GSTS.
  6. An acceptable dissertation resulting from original research must conform to requirements set forth by TGS. An alternative deliverable is a submitted (but not necessarily approved) first-author publication with proof of submission. The dissertation or submitted journal article must be uploaded to GSTS prior to submitting the Master's Completion Form. For more information, about thesis procedures, please see the "MS Degree with Thesis" section above.

## Grades

No P/NP registration will be accepted. A grade point average equal to a 3.0 is required for graduation for a Master's degree. A student whose overall grade average is not above a 3.0 is not meeting academic standards and will be placed on probation. Failure to remedy that situation may lead to dismissal by The Graduate School or the Biomedical Engineering Department. An incomplete grade (Y or K) for any course must be removed within one year of the official ending of the course. Please see the section about Satisfactory Academic Progress for more information.

## Registration

Registration details and recommended patterns of registration can be found on [the Graduate School website](#).

### TGS 512: Continuous Registration

- Required for all students who have completed their coursework and are continuing in their degree programs and are not registered in program coursework or any other TGS course.
- International students must be enrolled full-time at all times except in cases of academic difficulties, medical problems, or if they are in their last quarter at Northwestern; students who are in any of these circumstances and need to take a reduced course load must request a

“[reduced course load](#)” accommodation from the International Office. Summers are not required for registration/visa purposes.

## Financial Aid

There are no funding opportunities for MS students. All full-time graduate students in good academic standing are eligible to apply for student loans. These loans are provided by the combined efforts of the federal government, Northwestern, and cooperating financial institutions, and should be regarded as supplemental financial resources rather than the primary means of financing advanced degrees.

Master’s students are charged tuition per course. For loan purposes, they must be at least half-time enrolled (two credits per quarter) to be eligible for federal loan assistance. Students who are enrolled less than two units per quarter may apply for private loans.

Graduate students should contact [Student Financial Services](#) if they have questions regarding loans eligibility, registration requirements, and available options.

## Satisfactory Academic Progress

All MS students must make satisfactory academic progress as outlined by the criteria in the table below. If the student fails to meet the criteria, the corresponding consequence will be imposed. A probationary period will afford the student the opportunity to meet the standard for satisfactory academic progress. If students do not meet the standard for satisfactory academic progress, they will be excluded from the program with some exceptions noted in the “consequences” column of the table.

All academic-based exclusions are made by the BME Graduate Committee and/or TGS. For more information about the appeals process for those students who are placed on probation or excluded (dismissed), please refer to [TGS’s website](#). Each student’s academic progress is reported annually by the BME department to the student and to TGS through the Graduate Student Tracking System (GSTS).

Criterion	Set by	Consequence for Failing to Meet Criterion	Probation Length	Appeal-Eligible
Students must maintain a cumulative GPA greater than 3.0	TGS	Probation followed by exclusion if not remedied during probation	2 quarters	No
Students must have 3 or fewer X/Y grades	TGS	Probation followed by exclusion if not remedied during probation	2 quarters	No
Students must complete the MS within five years from initial registration	TGS	Probation followed by exclusion if not remedied during probation	2 quarters	No
Thesis students must make satisfactory research progress (meet milestones as outlined in handbook as determined by committee and/or Director of MS Program)	BME	Probation followed by EITHER 1) exclusion or 2) switch to non-thesis program if not remedied during probation	5 weeks	Yes
Thesis students must make satisfactory progress writing thesis (as determined by the committee and/or Director of MS Program)	BME	Probation followed by EITHER 1) exclusion or 2) switch to non-thesis program if not remedied during probation	5 weeks	Yes
Students must communicate with program and/or advisor (as assessed by the committee and/or Director of MS Program)	BME	Probation followed by exclusion if not remedied during probation	5 weeks	Yes
Thesis students must have a research advisor by mid-Winter quarter of their first year.	BME	Probation followed by EITHER 1) exclusion or 2) switch to non-thesis program if not remedied during probation	5 weeks	Yes

## Degree Completion and Graduation

Graduation procedures for both thesis and non-thesis students are as follows:

- Review the [academic calendar](#) for the deadline for the Application for Degree and Master's Completion Form. The internal deadline for the Master's Completion form is one week prior to the TGS deadline to allow for internal departmental review and approval by the Graduate Program Assistant. Both the Application for Degree and the Master's Completion Form are to be completed through GSTS.
- Please also review the [Graduation Checklist](#) as a guide for the following:
  - o Departmental review includes:
    - Confirmation that all degree requirements have been met (i.e., coursework, etc.).
    - Confirmation that the student has at least a 3.0 cumulative GPA and that X, Y, or NR grades have been resolved.
    - For thesis students:
      - Confirmation of completed committee update meeting. Students must upload the committee meeting slide deck with committee signatures to GSTS under "Documents".
      - Confirmation of successful defense and approved thesis. Students should upload the completed [Thesis Approval Form](#), approved thesis, and slides from the successful defense to GSTS.
    - For non-thesis students:
      - Confirmation of project courses. The student should upload three project deliverables (slides for a 20-minute presentation or 10+ page paper) to GSTS under the "Plan of Study" tab.
      - Completion of the Master's Completion Form in GSTS. The student should indicate Casey Ankeny as the Chair and Matthew Tresch as the Co-Chair on the form. Please check the "no thesis required" box.
- Students are responsible on ordering regalia in advance of graduation. Students will receive information via email on how to do so.

## Nondiscrimination Statement:

Northwestern University does not discriminate or permit discrimination by any member of its community against any individual on the basis of race, color, religion, national origin, sex, pregnancy, sexual orientation, gender identity, gender expression, parental status, marital status, age, disability, citizenship status, veteran status, genetic information, reproductive health decision making, or any other classification protected by law in matters of admissions, employment, housing, or services or in the educational programs or activities it operates. Harassment, whether verbal, physical, or visual, that is based on any of these characteristics is a form of discrimination. Further prohibited by law is discrimination against any employee and/or job applicant who chooses to inquire about, discuss, or disclose their own compensation or the compensation of another employee or applicant.

Northwestern University complies with federal and state laws that prohibit discrimination based on the protected categories listed above, including Title IX of the Education Amendments of 1972. Title IX requires educational institutions, such as Northwestern, to prohibit discrimination based on sex (including sexual harassment) in the University's educational programs and activities, including in matters of employment and admissions. In addition, Northwestern provides reasonable accommodations to qualified applicants, students, and employees with disabilities and to individuals

who are pregnant.

Any alleged violations of this policy or questions with respect to nondiscrimination or reasonable accommodations should be directed to Northwestern's Office of Equity, 1800 Sherman Avenue, Suite 4-500, Evanston, Illinois 60208, 847-467-6165, [equity@northwestern.edu](mailto:equity@northwestern.edu).

Questions specific to sex discrimination (including sexual misconduct and sexual harassment) should be directed to Northwestern's Title IX Coordinator in the Office of Equity, 1800 Sherman Avenue, Suite 4-500, Evanston, Illinois 60208, 847-467-6165, [TitleIXCoordinator@northwestern.edu](mailto:TitleIXCoordinator@northwestern.edu).

A person may also file a complaint with the Department of Education's Office for Civil Rights regarding an alleged violation of Title IX by visiting <https://www2.ed.gov/about/offices/list/ocr/complaintintro.html> or calling 800-421-3481. Inquiries about the application of Title IX to Northwestern may be referred to Northwestern's Title IX Coordinator, the United States Department of Education's Assistant Secretary for Civil Rights, or both.