BU BME Department

Graduate Handbook
For Master's Students

Spring 2025

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Section I: Introduction

Welcome to Boston University's Biomedical Engineering Master's Programs! This handbook serves as your comprehensive guide throughout your graduate journey and program requirements, policies, and procedures. It includes important information on course registration, advising, degree options, and resources such as career services and student organizations. You will also find guidance on specializations, clinical observations at Boston Medical Center (MEng only), and practicum requirements. Whether you are pursuing an MEng or an MS degree, this handbook provides valuable information to help you succeed.

Orientation and Advising

Orientation is typically held on the Friday before Labor Day (exact dates change every year) and is your first opportunity to meet program faculty and staff. Dr. Mario Cabodi, Director of Master's Programs, serves as the academic advisor for all incoming students, guiding them through their academic journey: *all questions related to program content, course planning, internships timing and career outcomes, should be directed to Prof. Cabodi*. Additionally, the Master's Program Administrator assists with advising, course registration, tracking graduation requirements, and event logistics: *all questions related to course enrollment, student account and holds, course and program petitions, required forms and signatures, should be directed to the Master's Program Administrator* (BMEmast@bu.edu). Additionally: all questions related to *ENG Specializations* should be directed to the respective Specialization coordinator; all questions about the details of an internship or co-op should be directed to the Graduate Program Office; all questions about visa status and other immigration issues should be directed to *ISSO*.

Blackboard, Practera

Boston University utilizes the Blackboard learning management system for course-related activities. This platform provides access to syllabi, course materials, assignments, and other resources. For additional information on using Blackboard, please refer to Blackboard at BU. The MEng Design course uses the Practera platform.

Section 2: Courses

Summary of Program Requirements for BME Master's Students

Practicum requirement

MEng Students: The practicum for the MEng program is satisfied by the BE695 medical device development project.

MS Students: The practicum for the MS program is fulfilled through a research Thesis (8 credits, at least 2 semesters), a Mentored Project (4 credits, 1 semester), or a laboratory-based class (4 credits).

General Course requirements

Students must complete one approved 4-credit math course from the list below and pass with a B+ or higher.

Technical electives are highly quantitative graduate courses in engineering (most ENG courses 500-level or above), computer science, math, physics, etc. Hard science courses outside of the ENG department may be requested and approved by the department by using the BME Petition Form. Note: the courses listed under the Technology Leadership electives section in this handbook do *not* meet the requirement of a technical elective.

Summer Courses and Registration

No engineering or biomedical engineering courses are offered during the summer term, but students often take a math course (from the list), or work on their project or thesis.

Note that if you are working on your MS thesis during both the spring semester and the upcoming fall semester, you are not required to register for the thesis course or pay tuition fees simply to maintain your enrollment status during the summer term between these semesters.

When enrolling in any summer course, you must pay tuition at the standard summer rate. This applies to all credit-bearing courses, including project, thesis, or other courses offered during summer sessions. International students should verify how summer enrollment affects their visa status. Summer courses typically run in condensed formats with 2 sessions (Summer I and Summer II); project or theses courses run for the entire summer semester.

Auditing Courses

An auditor is a student who attends a class to acquire knowledge but not to earn credits or a grade. *Audited courses do not count toward completing degree requirements.* An auditor may not change his or her status after the fifth week of classes for standard courses. Auditors must attend classes regularly, complete assigned reading and participate in discussions but they are excused from examinations.

Auditors are admitted to a course on a space-available basis and with the approval of the instructor. Auditors are subject to the full tuition and fees of the course. Students may not audit ENG 900-level, language, physical education, studio or laboratory courses.

Transfer Credits

Students may "place out of" required math or MS courses (but not BE 694/695, BE 952, or BE 954), if they have taken equivalent courses elsewhere at the graduate level, as long as those courses were not used to meet the requirements of an undergraduate or previous degree. For example, students who have taken a graduate-level physiology course may receive permission not to take BE 606. Students with extensive experience in quantitative molecular biology may receive permission not to take BE 605. This permission must be granted by submitting a BME Petition Form BEFORE the end of the Add/Drop period, but .

MEng Program Requirements

MEng students must complete a minimum total of 32 credits of approved coursework. The practicum requirement is satisfied through the BE 695 design project (No thesis, or other lab project, is required). A finalized Program Planning Sheet should be submitted to the Graduate Programs Office when applying for graduation, indicating the courses taken to fulfill the curriculum requirements (the BME department will obtain final approval and signatures by the Director of BME Master's Programs). A cumulative grade point average of 3.0 must be maintained. Grades of C- or lower are not acceptable for any course that you wish to use towards program requirements.

ENG BE 694 Biomedical and Clinical Needs Finding
ENG BE 695 Advanced Biomedical Design and Development
Three Graduate-Level Biomedical Engineering Electives (these courses must be taken within the BME department)
Two Graduate-Level Technical Electives* (may be satisfied by additional BE coursework)
Math Requirement (selected from approved list below)
Two Technology Leadership Requirement selected from the approved list below (BE 695 satisfies one)

Clinical Observations

All MEng students must take BE 694 *Biomedical and Clinical Needs Finding*. This course involves performing clinical observations at Boston University's affiliate hospital, Boston Medical Center (BMC).
In order to obtain medical clearance for these observations, students must complete the following steps:

- Submit all necessary immunization documentation to the BMC Occupational Health Center.
- Complete Workday training.
- Sign and submit the Intellectual Property (IP) Agreement.

Completing these requirements on time is important to ensure timely access to BMC orientations, clinical teams, and facilities: typically forms and trainings are assigned in June before the start of your MEng program. In our experience, it can take several weeks to obtain your vaccination records and any outstanding required vaccinations from your primary care provider; please be aware of this timeline.

Students will gain access to BMC by the start of the Fall semester, allowing them to attend surgeries and procedures in their respective clinical specialty. Students will be in direct contact with their lead surgeon, along with additional personnel from the hospital (physician's assistants, nurses, residents, fellows, etc.), to meet and

discuss their projects. The schedule of surgeries for the week is typically provided to the students, and the students can choose which procedures to attend based on their availability or interest.

MS with Thesis Students

MS with Thesis students are required to complete a minimum total of **36 credits** and successfully propose and defend an original MS thesis. A finalized Program Planning Sheet should be submitted for approval to both Research Advisor (Academic Advisor if the research advisor is off-campus) and to the Graduate Programs Office when applying for graduation, indicating the courses taken fulfill the curriculum requirements (the BME department will obtain final approval and signatures by the Director of BME Master's Programs). A cumulative grade point average of 3.0 must be maintained. Grades of C- or lower are not acceptable for any course that you wish to use towards program requirements.

BE 605 Molecular Bioengineering *or* **BE 606** Quantitative Physiology for Engineers *(or both)*
BE 790 Biomedical Engineering Seminar
Three Graduate-Level Biomedical Engineering Electives (these courses must be taken within BME department)
Two Graduate-Level Technical Electives (may be satisfied by additional BE coursework)
Math Requirement (selected from approved list below)
BE 954 Thesis Research (8 credits)

MS with Project Students

MS with Project students are required to complete a minimum total of **36 credits** and complete the required 4 credit Mentored Project. A suitable project must be identified and approved by the Director of BME Master's Programs. The mentored project must be supervised by a primary BME faculty member or an approved outside advisor. A finalized Program Planning Sheet should be submitted for approval by the Director of BME Masters Programs when applying for graduation, indicating the courses taken fulfill the curriculum requirements. A cumulative grade point average of 3.0 must be maintained. Grades of C- or lower are not acceptable.

BE 605 Molecular Bioengineering or **BE 606** Quantitative Physiology for Engineers
BE 790 Biomedical Engineering Seminar
Three Graduate-Level Biomedical Engineering Electives (these courses must be taken within BME department)
Three Graduate-Level Technical Electives (may be satisfied by additional BE coursework)
Math Requirement (selected from approved list below)
BE 952 Mentored Project (4 credits)

LEAP Students

LEAP students pursuing a graduate degree in BME are required to complete all foundational math, science, and engineering courses listed below, if they have not completed the course with a B or higher prior to matriculation.

Math

CAS MA 124 Calculus II *(Fall & Spring)*
CAS MA 225 Multivariate Calculus *(Fall & Spring)*
CAS MA 226 Differential Equations *(Fall & Spring)*

ENG EK 103 Computational Linear Algebra *(Fall & Spring)*

ENG EK 381 Probability Statistics & Data Science *(Fall & Spring)*

Science*

CAS PY 211 Physics I *(Fall & Spring)*

CAS PY 212 Physics II *(Fall & Spring)*

CAS CH 131 General Chemistry for Engineers *(Fall)*

ENG BE 209 Molecular Cell Biology *(Fall & Spring)*

Engineering

ENG EK 125 Intro to Programming for Engineers *(Fall & Spring)*

ENG EK 301 Engineering Mechanics *(Fall & Spring)*

ENG BE 403 Signals & Controls *(Fall & Spring)*

ENG BE 491 BME Measurements I *(Fall)*

*In addition to the science courses listed above, students must also complete one elective based on a focus area.

Technical Electives, Leadership Courses, and Math Courses

Technical electives are highly quantitative graduate courses in engineering (most ENG courses 500-level or above), computer science, math, physics, etc. Hard science courses outside of the ENG department may be requested and approved by the department by using the BME Petition Form. Note: *the courses listed under the Technology Leadership electives section in this handbook do not meet the requirement of a technical elective.*

Information about BU ENG elective courses are linked below by their respective department – please check MyBU to see whether a particular course is being offered:

Biomedical Engineering Courses

Mechanical Engineering Course Syllabi

Electrical and Computer Engineering Courses

Courses that Fulfill the Technology Leadership Requirement *(not technical electives)*

ENG ME 502 Invention: Technology Creation, Protection, and Commercialization *(Fall)*

ENG ME 510 Production Systems Analysis *(Fall)*

ENG ME 517 Product Development *(Spring)*

ENG ME 525 Technology Ventures *(Spring)*

ENG ME 537 Product Realization *(Spring)*

ENG ME 550 Product Supply Chain Design *(Spring)*

ENG ME 583 Product Management *(Spring)*

ENG ME 584 Manufacturing Strategy *(Spring)*

ENG ME 703 Managerial Cost Accounting *(Spring)*

ENG EK 731/QST HM 801 Bench to Bedside – Translating Biomedical Innovation from the Lab to the Marketplace *(Fall)*

QST HM 703 Health Sector Issues and Opportunities *(Fall, Spring)*
QST HM 710 Health Service Delivery: Strategies, Solutions and Execution *(Fall)*
QST HM 817 Advances in Digital Health *(Spring)*
QST HM 848 Driving Health Sector Innovation *(Spring)*
QST SI 750 Competition, Innovation, and Strategy *(Spring)*
QST SI 839 Design Thinking and Innovation *(Spring)*
QST SI 845 Technology Strategy *(Fall)*
QST SI 852 Starting New Ventures *(Fall, Spring)*
QST SI 855 Entrepreneurship *(Fall, Spring)*
QST SI 871 Strategies for Bringing Technology to Market *(Spring)*

Courses that Fulfill the BME Math Requirement

Students must complete one 4-credit math course from the list below and pass with a B+ or higher. Students should visit MyBU Student Portal for the most up-to-date information on course availability. Students may petition for a different course (500-level or higher) to satisfy the math requirement.

ENG EC 505 Stochastic Processes *(Fall)*
ENG EK 501 Mathematical Methods I: Linear Algebra and Complex Analysis *(Fall)*
ENG EC 523 Deep learning *(Fall, Spring)*
CAS MA 579 Numerical Methods for Biological Sciences *(Spring)*
CAS MA 561 Methods of Applied Mathematics I *(Fall)*
CAS MA 565 Mathematical Models in the Life Sciences *(Spring)*
CAS MA 581 Probability *(Fall, Spring)*
CAS MA 582 Mathematical Statistics *(Fall, Spring)*
CAS MA 583 Introduction to Stochastic Processes *(Spring)*
CAS MA 588 Nonparametric Statistics *(Fall)*
GRS MA 684 Modern Regression Analysis in R *(Spring)*
ENG BE 567 Nonlinear Systems in Biomedical Engineering *(Spring)*
CAS PY 501 Mathematical Physics *(Fall)*
ENG BE 601* - BE 604* Linear Algebra/Statistics & Numerical Methods *(Fall) *Register for both courses*
ENG ME 566 Advanced Engineering Mathematics *(Fall, Spring)*
GRS MA 681 Accel. Introduction to Statistical Methods for Quantitative Research *(Fall)*
SPH BS 861 Applied Statistics in Clinical Trials II *(Fall)*

Searching/Registering for Courses

Searching for Courses

Students can search for courses and descriptions using BU Course Search. Courses are listed by a three letter code indicating the school, followed by the two letter department code, followed by the three number course code (ex. ENG BE 695).

Some useful codes are displayed below:

CAS College of Arts & Sciences
ENG College of Engineering
- BE Biomedical Engineering
- BF Bioinformatics
- EC Electrical & Computer Engineering
- EK Engineering Core
- ME Mechanical Engineering
- MS Materials Science & Engineering
- SE Systems Engineering

GRS Graduate School of Arts & Sciences
MED School of Medicine
QST Questrom School of Business
SAR Sargent College of Health & Rehabilitation Sciences
SPH School of Public Health

Course Registration Videos and Guides:

To assist with the registration process, students should log into MyBU Student Portal to review the following guides and videos:

Class Search: From Preparation to Registration
Preparing for Registration
Registration Methods of Enrollment
Schedule Builder: From Preparation to Registration
Drop/Swap Classes (guide)
Class Status & Class Waitlist Overview (guide)

In order to determine if a BME course is being offered in a given semester, students must log into MyBU Student Portal. On the left side of the page, click on 'Class Information', then 'Class Search'. At the top of the page, navigate to 'Filter By letter' and click the drop button to 'E (ENGBE Biomedical Engin...)'. The first selection on the list, 'ENGBE - ENGBE Biomedical Engineering', will appear. Click on 'View Courses' to see the course descriptions, sections, times, and additional information. You can also use this process for other subjects you're interested in.

Registering for Classes

Students should check the Office of the University Registrar for the most up-to-date information on course registration. Course registration typically opens up in late-March or early-April for the upcoming fall semester, and late-October or early-November for the upcoming spring semester. It is strongly recommended that students start registering for classes when registration opens to ensure that they get into their first choice classes.

Registering for Classes

If the assigned enrollment period has opened, registration can occur from the Class Search page

On MyBU Student Portal there are multiple ways to find courses during registration. The two main ways to register for classes are by:

1. Adding courses to your Shopping Cart
2. Adding courses from the Class Search feature

For the Shopping Cart method, go to your cart, make sure the classes you want are checked, and select 'Enroll'. If you accidentally choose the wrong lab or discussion section, click the three dots on the right side of the course name, select 'Edit', and choose the correct discussion or lab. You can view the classes in your schedule by clicking on 'Schedule' from the menu on the left sidebar of your screen.

If you already know the exact classes you want but haven't added it to your cart or Schedule Builder, the Class Search feature is a great way to go. On the left sidebar, navigate to the Class Search feature and then follow the steps below:

Class Search → Term → Career → School/College → Subject

If you know the exact day and time, you can use it in the search parameters. Once you find the class you want in the search, you can enroll by clicking the three dots on the right side of the course name, then select 'Enroll'. You can also bypass these steps if you know the course number. Fill in:

Term → Career → School/College → Subject → Catalog Number

For more information regarding registration, please log into MyBU Student Portal to review the video and guide.

Error Messages

If you encounter a message while enrolling into a course and get a error message saying *"You are unable to enroll in this class at this time. Available seats are reserved, and you do not meet the reserve capacity requirements.",* it means that you do not currently have permission to enroll in the course. If you think this is a mistake, or if you want to request permission to take a course, email the Master's Program Administrator (BMEmast@bu.edu).

Section 3: MS research project and thesis

Research Project

MS students completing a research project are responsible for finding a research topic, conducting scientific studies under the guidance of an approved faculty member, and meeting the project expectations laid out by the lab's principal investigator.

Research Thesis

A major requirement for the MS with Thesis is a research-based thesis. Each student is responsible for finding a research topic, conducting scientific studies under the guidance of an approved faculty member, presenting the proposal and results to the general scientific community in a public defense and submitting a Thesis.

MS Thesis Advisory Committee Membership

After identifying a research advisor and thesis topic, each MS Thesis student forms an Advisory Committee which will run the MS Proposal and Thesis Defense. The Advisory Committee must have a minimum of three members:

- Two members must be from the BME primary faculty (tenured or tenure-track)
- The third member can either be from the BME primary faculty, BME affiliated faculty, or appropriate BME Research Associates
- Additional members of the committee can be from other BU departments or outside companies

The Chair of the Advisory Committee must be a primary BME faculty member who is NOT the research advisor or co-advisor.

If a researcher from outside the University serves on an Advisory Committee, a Special Service Appointment Form must be completed. The completed form and a copy of the person's curriculum vitae, with the Associate Chair for Graduate Programs signature, will then be submitted to the Graduate Programs Office for College-level approval.

MS Thesis Proposal

A brief written proposal (3-5 pages) of the MS research project must be presented no later than the semester before the student defends their thesis. It is the student's responsibility to schedule a formal meeting with their Advisory Committee members for discussion and approval of the proposal document. The student must present the MS Proposal and Thesis Committee Approval Form to the committee during this meeting. If the proposal is approved, the faculty members must sign the form, thereby indicating their willingness to participate on the committee. The student must submit the signed approval form, slides and the proposal document to BMEmast@bu.edu. It is required that the student's committee meet with the student regularly (at least annually) throughout the remainder of their thesis research.

MS Thesis Defense

A Thesis must be written and defended successfully for completion of the MS degree. In order for a student to make full use of the critiques on the proposal offered by his/her committee, students are not permitted to defend in the same semester in which the proposal was submitted. A full description of the format requirements for the

written thesis is included in the Boston University Libraries "A Guide for the Writers of Dissertations and Theses". It is the student's responsibility to confirm a date and time of the presentation with their committee members. The MS Thesis Defense Approval Form must be completed and submitted to Rodolfo Ramos two weeks prior to the presentation date. She will process the announcement of the MS Thesis Defense to the BME faculty and graduate students via email and add the event to the BME calendar.

The format of the defense is not rigid and is decided on by the Chair of the Advisory Committee. The student can expect to give a 30-40 minute seminar presenting the results of the completed project. There may be questions during the presentation or after the student has completed the presentation, depending on the decision of the committee.

Following a reasonable question period, the audience is dismissed, so that the committee may ask questions of the student privately; then the student is dismissed and the committee remains to complete its assessment of the thesis defense. The Advisory Committee must vote unanimously to pass the student. The results are noted on the MS Thesis Defense Form and submitted to Inna Gerzon.

Submission of the Final Thesis

The student will then follow the electronic submission guidelines provided by Mugar Library. Rodolfo Ramos will provide departmental electronic approval for the student upon receiving the original signatures page.

Rodolfo Ramos will coordinate the binding with an outside vendor but the student is responsible for printing the copies themselves. The cost for hardbound copies is $10 per copy (subsidized by the department). Theses to be hardbound are sent to an external bindery once a year (early fall). Students should be sure to leave a correct forwarding address after graduation so that their copy or copies can be mailed.

Finding a Research Home

Most students choose to perform their research with a primary BME faculty member or within affiliated research centers (Biological Design Center, Biomolecular Engineering Research Center, Center for Multiscale and Translational Mechanobiology, Nanotechnology Innovation Center, Neurophotonics Center, NSF Engineering Research Center in Cellular Metamaterials, Precision Diagnostics Center). Further information can be found on their respective websites.

Faculty, scientists or researchers (holding a PhD or MD) within or outside of the University can be approved using the MS Thesis Supervisor Approval Form to be a student's principal research advisor if they have an active research collaboration with a primary BME faculty member who will agree to be the student's research co-advisor. This form should be submitted as soon as the co-advisors are identified.

Finding a Research Advisor and Project/Thesis

Occasionally students enter the program with a specific research advisor in mind and may even plan to work on a specific project/thesis. The majority of students, however, will utilize the first two semesters to determine what their specific interests are in the field of biomedical engineering and identify potential labs.

Another valuable way of learning more about specific research opportunities is through the required BE 790 seminar series and to speak with other graduate students who are currently working in the department's various labs. The best measure for learning about working in a specific lab is to make an appointment to speak with the faculty member in charge of a lab you are interested in. Once a student finds a research opportunity and has the consent of a faculty member to be his/her advisor, the process of developing a project begins.

Academic vs. Research Advisors

All incoming Master's students are advised by Prof. Mario Cabodi, Director of BME Masters Programs.

For MS with Thesis students, the research advisor also serves as the student's academic advisor. In the case where an outside researcher serves as the principal research advisor, the BU BME co-advisor serves as the student's academic advisor (see section below).

Off-Campus Thesis/Project

Graduate research is *usually* carried out in laboratories and centers of BME faculty located on campus; however, other faculty, scientists or researchers (holding a PhD or MD) within or outside of the University can be approved to be a student's principal research advisor if they have an active research collaboration with a primary BME faculty member who will agree to be the student's research co-advisor. The MS Thesis Supervisor Approval Form must be submitted as soon as the co-advisors are identified.

In cases of non-BU advisors, there may be special problems that arise due to intellectual property and other conflicts of interest, which must be addressed prior to starting the work.

Invention and Copyright Agreements

Students who receive support from sponsored research programs or who make significant use of University funds and facilities are required to sign the BU Intellectual Property Policy Agreement. Seek counsel with your faculty advisor about this policy. A signed agreement form is required through PolicyTech for the Charles River Campus.

Section 3: Degree Timelines, Options and Financials

MEng Program Completion Time Schedule

The MEng program is typically completed in two semesters (Fall and Spring). Each student has a maximum of five (5) years from the time of matriculation to complete the requirements for the MEng degree. If a student has still not finished the required courses in this time, the student must reapply and be accepted again to the department in order to continue.

MS with Mentored Project, MS with Thesis Completion Time Schedule

The student and their research advisor are responsible for completing the research in a reasonable timeframe for the MS degree. MS students working on a research project typically complete the program in one calendar year, with the flexibility to reduce or extend this timing. MS students doing a thesis typically complete the program in two years after entering, which includes at least two semesters of full-time work on the research project.

Specializations

After matriculating into an existing degree program, all Master's degree students are eligible to pursue an appropriate Specialization, which will be added to their degree title on their transcript. Specializations offered include: Robotics, Data Analytics, and Cybersecurity. Requirements for each specialization, in addition to further information about declaring a specialization, can be found on the BU ENG website.

Note: Specialization courses and BME program requirements tend to have little overlap. Any student who wishes to complete a specialization may need to take additional semesters of coursework prior to completing their degree. Talk to your advisor if you wish to complete a specialization.

'With Engineering Practice' Degree Option

The College of Engineering offers an engineering practice degree option to students in all of its master's programs. Engineering practice is a valuable opportunity for a student at the master's level to complete an approved internship integral to their program of study, allowing them to develop additional technical and professional skills. Students interested in the engineering practice degree option must apply and meet the requirements outlined below. Students successfully completing the engineering practice degree option of their program will earn the accompanying degree designation (e.g., Master of Science in biomedical engineering with engineering practice).

Internships used to complete the degree requirements must be relevant to the student's program of study and must go through a program-level approval process. Satisfactory completion of the requirement is determined by the program and then formally recorded by the Graduate Programs Office (enggrad@bu.edu; 617-353-9760).

The student must complete one full-time paid internship (minimum 30–40 hours/week for at least 12 weeks) or two part-time paid internships (each 15–20 hours/week for at least 12 weeks). These internships typical start in January or June and last 6 months.

**Note: Since MEng students have to complete the BE695 project in consecutive fall and spring semesters, the 'with practice' option is typically done in the summer following completion of BE695.*

Requirements and Grading

- A paid internship site and project must be approved by the student's faculty advisor.
- Students must register for ENG EK 697 (part time) or ENG EK 698 (full time), both zero credits.
- A mid-point review between the student and the internship supervisor must be conducted and submitted.
- Before the end of the semester in which the internship takes place, a final report must be submitted and reviewed by the academic advisor.
- Students receive a grade of Pass or Fail. The final grade is based on satisfactory completion of all requirements and is determined by the academic advisor in consultation with the internship supervisor.

For International Students

- International students must have completed two semesters in full-time status to be eligible to begin an internship in the United States, and they must complete additional paperwork with the BU International Students & Scholars Office (ISSO) after registration.
- International students with an off-campus internship must complete the Curricular Practical Training (CPT) form and email the approved Engineering Practice Approval form and the CPT form to the Graduate Programs office for review before submitting to the ISSO. For more information about CPT requirements, see the graduate website.

Financial Aid

For a full estimated cost of attendance, please visit the graduate engineering admissions page. The department offers a limited number of merit-based partial tuition scholarships. Need-based federal student loans are also available and can be applied for using the FAFSA.

In addition to loans (federal and credit-based) and external funding opportunities, students can apply to a range of fellowships and research assistantships through different departments/colleges. Please find a list of fellowships here. Information about teaching and research assistantships is made available through email before the start of each semester.

It is important to first recognize that Master's Research Assistantships (MRA's) are not guaranteed for MS with Thesis students. MRA's are offered by individual faculty members with sponsored research grants.

On-campus employment, including in research labs

Research can be paid through stipend (dependent on lab funding /PI). A Master Research Assistant (MRA) is a member of a research group in a laboratory or center. Work on the Thesis is normally part of this position's assignments. MRA's are expected to work full-time, with time allowed for courses during the academic year. An MRA carries no tuition support.

A variety of paid part-time campus positions are available for graduate students through the Student Employment Office. Students receiving any form of financial support for graduate studies are not permitted additional employment without prior written approval from both the student's advisor and the department.

Section 4: Resources

BME Buildings / Spaces / Places to Study

BU has a plethora of places to study, meet, and conduct research. Certain conference rooms and classrooms can be reserved for a single-time use. Long-term access for laboratories, offices, and Ingalls can be obtained through Access Management Portal. You'll need to use your MyBu login to request door access. First, select a site, which will show all the ENG buildings. At the top right of the screen, click 'ADD NEW' and fill in the Request Name, Justification (reason for requesting access), and choose from the list of access/clearances (laboratories and offices). Be sure to add your email at the end of the form before hitting SUBMIT REQUEST at the top right.

Engineering Research Building (ERB)
44 Cummington Mall

Obtain room access (laboratories, offices, and Ingalls):

Ingalls Engineering Resource Center (Floor 1)
Engineering-only study space with cubicles, computers, printers, and study rooms that can be reserved in advance.
Open 7AM to 11PM, 7 days a week.

SILab (Floor 1)
Engineering-only laboratory space where students can work on independent or class projects. List of equipment can be found here.

MEng Lab and Lounge (Floor 2)
Medical Device Development Lab with team rooms, 3D printers, prototyping materials, and a lounge with seating, a microwave, and a fridge.

BME Graduate Lounge (Floor 2)
BME graduate students only space with a table and chairs, microwave, and fridge
(NOT ACCESSIBLE until Fall 2025)

Bioengineering Technology & Entrepreneurship Center: BTEC (Floor 2)
A 5000-square-foot bioengineering "maker space" with a Molecular, Cellular, & Tissue Engineering Suite, a Biosensors & Instrumentation Suite, and a Digital & Predictive Medicine Design Suite.

BioInterface Technologies (BIT) Facility (various)
A central teaching and research facility with a focus on bio- material and tissue engineering. BIT offers instrumentation in biomaterial synthesis, property analysis and biological assessment such as mechanical testing, surface modification and analysis, particle synthesis and analysis, and chemical and biological analysis.

https://www.bu.edu/becf/biointerface-technologies-bit-facility/

Micro/Nano Imaging (MNI) Facility (various)
A teaching and research facility with a focus on optical imaging metrology of biological materials ranging from tissues to individual molecules.The facility has a wide array of commercially available optical microscopes and a large selection of microscope objectives.
https://www.bu.edu/becf/micronano-imaging-mni-facility/

BME Kitchenette (Floor 4)
There is a small kitchenette (including a refrigerator) that is available for faculty, graduate students, and staff in ERB 407. A copy machine is available for students.
(NOT ACCESSIBLE until Spring 2025)

BME Mail Room (Floor 2, #201)
Program-related packages are delivered and available for pickup in ERB 201.

Center for Integrated Life Sciences & Engineering (CILSE)
610 Commonwealth Ave
Study Space?
Many engineering offices and labs are located here.
Room access: email Ben Reale breale@bu.edu or call 617-358-1693

Life Science and Engineering Building (LSE)
24 Cummington Mall
Some BME labs are located here along with Biology and Bioinformatics programs. The large B03 classroom is open for studying when classes are not meeting.

BU Photonics Center (PHO)
8 Saint Mary's St
Some BME courses and labs are located here, along with physics, MechE, etc. Several small study areas are available on most floors.

Engineering Product Innovation Center (EPIC)
750 Commonwealth Ave
A 15,000 square foot, multi-million dollar, engineering and manufacturing facility open to all BU students. List of equipment can be found here.

George Sherman Union (GSU)
775 Commonwealth Ave
Student center and food court. Lots of open tables. Career fairs are often held in the ballroom on the second floor.

Mugar Memorial Library
771 Commonwealth Ave
Offers study rooms and spaces to accommodate different needs, including collaborative, considerate, and silent.

Science & Engineering Library
38 Cummington Mall
Cubicles and tables for studying. Access to textbooks for classes in Astronomy, Biology, Chemistry, Computer Science, Mathematics & Statistics, and Physics departments, as well as the College of Engineering.

Center for Computing & Data Sciences
665 Commonwealth Ave
Plenty of study space on the first couple of floors, with Saxbys located on the first floor

Questrom School of Business
595 Commonwealth Ave
Main floor has a bunch of seating, and the second floor has a very large Starbucks with booths, tables, and window seats.

Lawn outside of the Communications Building
640 Commonwealth Ave
Tables and green space

Engineering IT
48 Cummington Mall (Room B01)
Hardware and software support for engineering department/lab computers.
http://www.bu.edu/eng/engit/

BUild Lab
730 Commonwealth Ave
Home to the Innovate@BU initiative, where current students and alumni can find inspiration for innovative ideas and start for-profit or non-profit ventures. Collaboration and study spaces available.

Off campus but highly recommend: **Boston Public Library**
700 Boylston St
Huge study room, courtyard, cafe, tables, etc.

BU Fitness & Recreation Center:
915 Commonwealth Ave
Among other things, FitRec boasts an 18,000-square-foot weight and cardio room, a 1/7 mile indoor running track, a climbing wall, a Pro Shop, racquetball and squash courts, two swimming pools, and the lazy river. Additionally, the center hosts many outdoor programs and trips, fitness classes, sports lessons, and club and intramural sports.

Career Resources

The College of Engineering has an active Career Development Office (CDO) which works with students to source employment opportunities, prepare for the interview process and provide guidance during offer negotiation. The college hosts multiple networking events, including two annual engineering career fairs offering opportunities to connect with a wide range of prospective employers in a multitude of industries and companies.

In addition, Masters students can take advantage of a 12-week 1-credit Career course or professional development workshops called The Engineering Masters Series designed specifically for Masters students.

In order to schedule meetings with an advisor at the CDO, simply register / log in to your Handshake account. Click *Career Center* in the top right menu, and click Appointments to book an in-person or virtual appointment.

ENG Mentors Alumni-Student Program: ENG Mentors is a 12-week virtual alumni-student mentoring program coordinated by the College of Engineering Career Development Office each semester. Student participants are matched with alumni mentors for personal and professional development.

Student Organizations

BME Graduate Student Committee (GSC): Official departmental student organization that communicates with the department on academic concerns, as well as programming social, professional development, outreach, and other events.
http://www.bu.edu/bmegsc/

Student Association of Graduate Engineers (SAGE): Organizes social and professional events for all graduate students in ENG.
http://www.bu.edu/sage/

Graduate Women in Science and Engineering (GWISE) & WISEguys: Organizes professional development, social and outreach events particularly for graduate women in ENG and science disciplines. But it is not exclusive to women! Men who support women in STEM are encouraged to join the WISEguys mailing list and come out to events.
http://www.bu.edu/gwise/

Graduate and Professional Leadership Council (GPLC): The voice of graduate and professional students at Boston University. The purpose of the GPLC is to provide graduate and professional students with a forum to discuss concerns and advocate policy change with administrators at Boston University. The leaders of the GPLC accomplish this goal by soliciting input from the graduate and professional student body, identifying key initiatives, and presenting recommendations to the Associate Provost for Graduate Affairs and the Graduate Council.
http://www.bu.edu/gplc/

Master's Program Ambassadors: Representatives from BME master's programs lead community-building/social events for both incoming and current students.

Housing

Living On-campus
BU has limited on-campus housing that is available to graduate students on a first-come-first-served basis. The apartments come fully furnished, and are convenient to academic buildings on the Charles River Campus (CRC). Students may apply for on-campus graduate housing through the Graduate Housing Portal.

Living Off-campus
There are plenty of off-campus housing options available in the neighborhoods surrounding CRC. Popular neighborhoods for students include Allston/Brighton, Brookline, Cambridge (mainly Cambridge Port), Fenway, and Kenmore Square. More information on neighborhoods can be found here.

Transportation

Getting to the Charles River Campus (CRC)

- *Bike:* MA has a large bike share system, Bluebikes, with locations including Boston, Brookline, and Cambridge. BU offers discounted membership rates.
- *Public transportation:* Boston University's own free shuttle service, The BUS, runs through different BU campuses, including the medical campus. MBTA buses that run through parts of the CRC include 57, 47, CT2, 8, 19, 60, 65, and 66. The MBTA Green B line also runs through the heart of campus. The most up-to-date information regarding MBTA bus and T services can be found here.

Getting to the Boston Medical Center (BMC)
Traveling between Boston University's CRC and the Medical Campus is easy thanks to the The BUS service. The free Shuttle runs every 10-30 minutes (depending on the day and time). The schedule is available on the Terrier Transit App. Various MBTA buses (1, 8, 10, 47, Silver line, CT3) also stop at the medical campus.

On-Campus Health and Wellness Resources

- **Student Health Services** (http://bu.edu/shs)
- Primary Care: Medical Services for routine and urgent health concerns
- Behavioral Medicine: Mental health services including therapy and psychiatry
- Health Promotion & Prevention: Resources for sleep, stress, substance use, and sexual health
- Sexual Assault Response & Prevention Center (SARP): Counseling and advocacy for survivors of violence

Mental Health Resources

Graduate students have access to mental health resources through the Student Health Services Behavioral Medicine Office. These services are open to all full-time students. To contact the office, call 617-353-3569. They offer help for issues related to stress, anxiety, depression, sleep concerns, attentional issues, and many other topics. They can also refer you to appropriate specialized providers, if necessary. In addition to individual assistance, they offer programming specific to graduate students, such as weekly graduate student discussion groups.

Clinicians are available 24/7, for daytime emergency triage and phone consultations, as well as mental health emergencies that occur after the clinic is closed. Call 617-353-3569 anytime, 24/7.

Ombuds Conflict Resolution (https://www.bu.edu/ombuds/)
The Ombuds Office is a confidential, independent, informal, and impartial office where any member of the BU community may seek assistance addressing concerns related to life, work, or study at BU.

Student Wellbeing (https://www.bu.edu/studentwellbeing/)
Student Wellbeing is a campus-wide initiative to support students' health and wellbeing during their time at BU. Several resources, programs, and events can be found on their website.

Section 5: Administrative

College of Engineering Graduate Policy

Each student has a maximum of five (5) years from the time of matriculation to complete the requirements for the master's degree. If a student has still not finished the required courses and research thesis/project in this time, the student must reapply and be accepted again to the department in order to continue.

Academic Standards

The academic progress of every graduate student is reviewed at the end of each semester. Failure to make satisfactory progress and remain in **Good Standing** can result in **Academic Probation**, **Suspension** for a stated time or until stated conditions are met, or **Dismissal**, as detailed below.

Grades of C– or lower are not acceptable for Master's students.

Good Standing

Students maintain good academic standing when they: (1) earn a semester GPA of at least 3.0 (students enrolled only in Pass/Fail courses are exempt from the semester GPA standard); and (2) maintain a cumulative GPA of at least 3.0.

Academic Probation

A student is put on **Academic Probation** when s/he earns a semester or cumulative GPA below 3.0. Students on Academic Probation may have their financial aid discontinued. In the event that the semester or cumulative GPA is below a 2.0, a student may be dismissed from the program.

Students are reviewed after one semester on Academic Probation. Those who earn a semester and cumulative GPA of 3.0 or above will return to **Good Standing**. Those students who do not achieve Good Standing (as defined above) after the probationary semester will be subject to **Academic Suspension**, **Dismissal**, or an additional semester of Academic Probation as determined by the College on a case-by-case basis.

Academic Suspension

A student on Academic Probation faces Academic Suspension or Dismissal when s/he has not achieved Good Standing (as defined above) after the most recent semester of Academic Probation. Specifics Regarding Dismissal or the duration and terms of the Academic Suspension will be determined by the College on a case-by-case basis.

Reinstatement after Academic Suspension

Students who have fulfilled their period of Academic Suspension must meet with their academic advisor and must also reestablish their standing in the College by contacting the College of Engineering Graduate Programs Office (enggrad@bu.edu or 617-353-9760).

Dismissal

Dismissal results in permanent separation from the University. Appeals of Dismissal or Suspension are directed to the Associate Dean for Academic Programs.

University Policies and Resources

Equal Opportunity and Nondiscrimination

Sexual Misconduct / Title IX Policy
Equal Opportunity and Nondiscrimination
Complaint Procedures in Cases of Alleged Unlawful Discrimination or Harassment
Disability Accommodation
Equal Opportunity/Affirmative Action Policy
Student Grievance Procedure in Cases of Alleged Disability Discrimination

If you have questions about the policies above, please contact:
Stacey Herman, Assistant Dean, Graduate Programs at smherman@bu.edu or 617-353-9763.

Staff Directory

BME Graduate Programs Administration

Darren Roblyer *Associate Chair for Graduate Programs*	roblyer@bu.edu
Mario Cabodi *Director of BME Masters Programs*	cabodi@bu.edu
Paula Maxwell *Assistant Director, Academic Programs*	pmxwll@bu.edu
Master's Program Administrator	BMEmast@bu.edu

BME Department Administration

John White *Chair*	jwhite@bu.edu
Mary Dunlop *Vice Chair*	mjdunlop@bu.edu
Lynne Brogan *Director*	ltbrogan@bu.edu
Katie Eno *Assistant Director, Finance*	keno@bu.edu

Assistant to the Chair	
John Benducci *Undergraduate Program Administrator*	jbenducc@bu.edu
Tara Sorrentino *Grant Manager*	tarmac@bu.edu
Laura Prusaitis *Grant Manager*	laurapru@bu.edu
Debby Chiu *Grant Manager*	dwchiu@bu.edu
Kyle Best *Grant Administrator*	kmabest@bu.edu
Ian Butler *Grant Administrator*	ibutler@bu.edu
Alexa LaCroix *Senior Program Coordinator*	arlocroi@bu.edu
Sage Herbert *Senior Program Coordinator*	sherbert@bu.edu

College of ENG Administration - Dean's Office & GPO

Elise F. Morgan *Dean ad Interim*	efmorgan@bu.edu
Solomon Eisenberg *Senior Associate Dean for Academic Programs*	sre@bu.edu
George Zhang *Records Manager*	gzhang1@bu.edu
Stacey Herman *Assistant Dean, Graduate Programs*	smherman@bu.edu
Christie Barone *Director, Master's Admissions and Recruitment*	cbarone@bu.edu
Anthony Morejon *Associate Director, Financial Aid*	abmore@bu.edu

Andy Martin *Assistant Director, Enrollment Operations*	andmarti@bu.edu
Stefanie Kane *Assistant Director, Admissions & LEAP*	skane@bu.edu

Global Directory

Contact information for faculty and staff from other BU schools and engineering departments, as well as classmates, can be found using the global directory.