

# Interfaculty Graduate Program Biological and Biomedical Engineering Requirements for completing a Master's Degree

# Requirements

A Master's Degree in Biological and Biomedical Engineering (BBME) requires the student to:

- o Complete a minimum of 21 course credits
- Complete 24 Thesis credits
- Submit a thesis based on their research that is passed by both internal and external reviewers

# Time Requirement

- The Master's Program at McGill University requires a minimum residence of three full-time terms, i.e., 1½ years.
- The Master's Program must be completed within 3 years of first registration.
- A student must register for at least 12 credits, and pay full fees, during each of the three residency terms.
- After the mandatory residency period, students register for additional sessions at reduced fees.
- Students are encouraged to complete their Master's degree as soon as possible. Most students in the BBME Master's Program complete their degree in less than 2½ years.

# **Course Requirements** (Total credits: 21)

 All students are <u>required</u> to take the two-term course <u>Seminars in Biological & Biomedical Engineering</u> (BBME-600, 3 credits) in consecutive terms (D1 & D2 or N1 & N2), starting in their second term or later.

# For students who entered prior to Fall 2018 term

- A minimum of 12 additional credits must come from 500-level-or-higher core courses found here: <a href="http://www.mcgill.ca/bbme/students/courses">http://www.mcgill.ca/bbme/students/courses</a>. These 12 credits must include at least one "quantitative" course (i.e., students must take at least one of the following: BIEN-510; 520; 530; 550; 560; 570; 590 or BMDE-502; 503; 512; 519; 610; 660, or MDPH 607).
- The remainder of the 21 credits may be selected from BIEN and BMDE courses or from courses given by
  other Departments with the prior written approval of the Graduate Program Director (GPD). A list of approved
  non-core courses may be found here: <a href="https://www.mcgill.ca/bbme/students/courses">https://www.mcgill.ca/bbme/students/courses</a>. Other courses may be
  accepted towards this requirement with the prior written approval of the student's supervisor and the GPD.

### For students entering as of Fall 2018 term

- A minimum of 9 additional credits must come from 500-level-or-higher core courses found here: <a href="http://www.mcgill.ca/bbme/students/courses">http://www.mcgill.ca/bbme/students/courses</a>. These 9 credits must include at least one "quantitative" course (i.e., students must take at least one of the following: BIEN-510; 520; 530; 550; 560; 570; 590 or BMDE-502; 503; 512; 519; 610; 660, or MDPH 607).
- The remainder of the 21 credits may be selected from courses given by BIEN, BMDE, or other Departments (non-core courses) with the prior written approval of the Graduate Program Director (GPD). A list of pre-approved non-core courses may be found here: <a href="https://www.mcgill.ca/bbme/students/courses">https://www.mcgill.ca/bbme/students/courses</a>. Other courses may be accepted towards this requirement with the prior written approval of the student's supervisor and the GPD.
- At least 3 credits of the above-mentioned non-core courses must have both life-science content and content from the physical sciences, engineering, or computer science.



# Thesis Requirements (Total credits: 24)

• The total number of credits allotted to the thesis in the Master's Program is 24. These credits are obtained by registering for the following courses, one per semester, over the three residency terms as indicated below:

Term/Semester	Course No.	Course Name	No. of Credits
First	BBME-693	Thesis Research	6
Second	BBME-694	Thesis Research	6
Third	BBME-695	Thesis Submission	12

All three thesis courses must appear on your transcript. **NOTE: Do not register for any of these courses more than once.** 

The Master's thesis must be prepared and submitted following the guidelines outlined on the Graduate and Postdoctoral Studies Web site <a href="http://www.mcgill.ca/gps/students/thesis">http://www.mcgill.ca/gps/students/thesis</a>.

# **Progress Tracking**

Progress for the Master's Program is tracked with the following schedule of meetings:



# **Student Advising Meeting**This meeting takes place within ten (10) days of the student starting the Program.

myProgress Milestone: Master's Supervisor

#### **Initial Thesis Meeting**

This meeting takes place within three (3) months of the student starting the Program.

myProgress Milestone: Master Yr1 Progress Tracking 1

Policy Form

#### **Thesis Progress Meetings**

This meeting must take place within six (6) months of the Initial Thesis Meeting and yearly thereafter.

myProgress Milestone: Master Yr1 Progress Tracking 2 Master's Yr2 Progress Tracking Policy Form

#### **Thesis Submission**

Submission of a thesis that must show familiarity with previous work in the field and demonstrate the ability to carry out research, organize results and defend the approach and conclusions in a scholarly manner.

**GPS Thesis Guidelines** 

**Policy** 

<u>Form</u>



# **Student Advising Meeting**

- Must take place within ten (10) days of the student starting the Program.
- The meeting is between the student and the BBME Student Affairs Officer (SAO).
- In this meeting the SAO will discuss course selection including Program entry requirements (i.e. pre-requisites)
- The outcome of this meeting is always "Satisfactory".

# **Initial Thesis Meeting**

- Must take place, and the form must be completed and signed, within three (3) months of the student starting the Program.
- An "Unsatisfactory" initial meeting must be repeated within six (6) weeks.
- A student will be asked to withdraw from the Program following two consecutive Initial Thesis Meetings where
  progress is deemed to be Unsatisfactory.

# **Thesis Progress Meetings**

- Must take place, and the form must be completed and signed, within six (6) months of the Initial Thesis Meeting and yearly thereafter in the case of satisfactory progress.
- Following a meeting where progress was deemed to be Unsatisfactory, a supplementary progress tracking meeting must be held within three (3) months.
- A student will be asked to withdraw from the Program following two consecutive Progress Meetings where
  progress is deemed to be Unsatisfactory.

#### Notes:

- With the exception of the Student Advising Meeting, the student, their supervisor, and the GPD or Associate GPD must be present at all meetings.
- Forms and policy statements are available on the BBME Web site.
- The Graduate Program Coordinator (GPC) will notify the student that the meeting is due and attempt to schedule it. It is the student's responsibility to ensure that this occurs in a timely manner, assist with scheduling the meeting if necessary, and supply the necessary documentation. Failure to hold a meeting in a timely manner will result in an "Unsatisfactory" rating for the meeting.
- Students are required to prepare and circulate a report prior to each scheduled meeting. A student's submission for a meeting (initial report, progress report, etc.) will be due on a date fixed by the GPC and will be communicated to the student well in advance of the meeting. The report must be submitted no later than that date, even if the date falls on a weekend or holiday, and regardless of when the meeting takes place. Submission dates will be tracked by the GPC. A report submitted late will result in the student receiving a warning that will be included in the student's record. A second report submitted late will be treated as equivalent to an 'Unsuccessful' meeting for the purposes of determining the student's status in the program.
- Any change of membership for student advisory committees should be sent to the GPC at <a href="info.bbme@mcgill.ca">info.bbme@mcgill.ca</a>. The GPC will forward these requests to the GPD for approval. The GPC needs to check and update the student's dossier, and we need to make sure that the committee membership rules are adhered to.
- Any student-related forms that needs a GPD or departmental signature (such as thesis submission forms) should be sent to the GPC at <a href="mailto:info.bbme@mcgill.ca">info.bbme@mcgill.ca</a>. The GPC will then forward it to the GPD or the department chair for signature as needed. This will facilitate proper tracking of student forms.



# **Extraordinary Meeting**

This is used for addressing issues outside the normal meeting schedule and can occur at any time during the student's program. See the <u>policy document for Extraordinary meetings</u> for details.

# Fast-Track Transfer to the Ph.D. Program

There is a possibility of proceeding directly to the Ph.D. Program after completion of M.Eng. course work without having to complete a thesis. This arrangement is called Fast-Tracking and is used only in special circumstances where the student has performed very well in assigned courses and demonstrated exceptional research/creative potential, and where their Master's research has given rise to a project that can be extended to a Ph.D.-level project. The policy and procedures for Fast-Track Transfer to the Ph.D. Program can be found on the BBME Web site. Policy Forms

# Stages Outside the University

Deadlines for student meetings may be extended for students participating in *Stages* outside the university. The following departmental policy will apply:

- The stage must be approved by the student's supervisor and the GPD.
- The date, duration and location of the stage must be noted on the tracking forms.
- Extensions to meeting dates will be determined by the committee in advance and approved by the GPD.
- Irrespective of any extension of meeting deadline, the degree must be completed within the university's time limitation policy.