

Interfaculty Graduate Program Biological and Biomedical Engineering Ph.D. Comprehensive Preparation Meeting Policy and Procedures

Objectives

- Help the student prepare for the Ph.D. Thesis Proposal and Comprehensive Examination.
- Evaluate the student's academic and research progress.
- Assist the student in developing a Thesis Proposal where the rationale and specific objectives are clearly defined and within the scope expected of a Ph.D.
- Clarify and update the areas for general questioning the student will be responsible for in the Ph.D. Thesis Proposal and Comprehensive Exam. Areas for general questioning should include at least one area in the life sciences and at least one area in the physical sciences and engineering, as determined by the committee.
- Provide the student with practice in scientific writing, oral presentation and answering questions.

Timing

The Ph.D. Comprehensive Preparation Meeting should be held after the successful completion of the Preliminary Meeting according to the following schedule.

Curriculum Year Upon Entry	Deadline for Ph.D. comprehensive-exam preparation meeting
1	Within eleven (11) months of the Preliminary Meeting
2	Within six (6) months of the Preliminary Meeting

Meeting Format

The Ph.D. Comprehensive Preparation Meeting is held with the student's Ph.D. Advisory Committee and follows the same general format as the Comprehensive Examination. It consists of the following three components:

Part A: Thesis Proposal: The student must present a draft of a written Thesis Proposal prepared according to the guidelines in Appendix A of the [Ph.D. Thesis Proposal and Comprehensive Exam Policy and Procedures](#). It is not expected that the proposal will be fully developed at this stage, and consequently, the draft proposal may be substantially shorter than the final document. However, it must be developed in enough detail to allow the Committee to evaluate the significance of the objectives and the appropriateness of the methods to be used. **This draft proposal must be circulated to the committee members and info.bbme@mcgill.ca, one week prior to the meeting unless otherwise specified by the GPC. Failure to circulate the draft proposal on time may impact the student's status in the program. Additional details may be found here: [Requirements for completing a PhD Degree](#).**

Part B: Thesis Proposal Presentation: The student will make an oral presentation of their Thesis Proposal to the Committee and defend it by responding to the Committee's questions directly related to the background, progress,

and the proposed work. The presentation should be no longer than twenty (20) minutes, not including questions. Normally, the subsequent discussion period directly related to the proposal should last no more than forty-five (45) minutes.

Part C: General Competence. Following the Thesis Proposal presentation and discussion, the Committee will question the student to determine their general competence in the areas defined during the Preliminary Meeting. The objective will be to ensure that the student is developing the general knowledge and competence in the areas of Biological and Biomedical Engineering relevant to the proposed project. It will also provide the student with experience on the type and level of questions to expect at the Ph.D. Thesis Proposal and Comprehensive Examination. Normally, the general competence part of the meeting should last no more than forty-five (45) minutes.

Procedure

1. Prior to the start of the meeting, the Committee will meet without the student to review the student's progress with the Supervisor, flag any areas of concern, and discuss the written Thesis Proposal.
2. The student will make an oral presentation of the Thesis Proposal and answer questions from the Committee members. The Committee should reserve questioning until the end of the student's presentation except when important clarifications are required.
3. The student will then withdraw and the Committee will:
 - a. Determine the meeting outcome (as defined below)
 - b. Identify any areas of concern and suggest corrective action
 - c. Re-evaluate and modify, as necessary, the areas the student will be responsible for during the Ph.D. Thesis Proposal and Comprehensive Exam
 - d. Determine any other advice to be provided to the student
 - e. Based on the outcome, set the date for the next meeting

Evaluation & Outcomes

It is to be understood that the student will be evaluated from the perspective of a Preparation Meeting. Consequently, students are not expected to present a fully worked-out Thesis Proposal or to be fully competent in all the assigned areas. Rather, the Committee will evaluate whether the student is progressing at a rate that makes it probable they will achieve the necessary level expected by the time of the Ph.D. Thesis Proposal and Comprehensive Meeting.

When a student demonstrates outstanding performance the Ph.D. Advisory Committee may elect to fast-track the comprehensive exam process and forego a proper Ph.D. Thesis Proposal and Comprehensive Examination Meeting. This decision requires unanimous approval by all PhD Advisory Committee members at the conclusion of this meeting. Note that a single committee member can disapprove fast tracking, if for example, it is felt that the questions asked during the meeting were not at the same level as those typically asked during a PhD Comprehensive Exam.

Given this context, each component of the evaluation will be rated as *Satisfactory*, *Conditional*, or *Unsatisfactory*. The overall result of the Ph.D. Comprehensive Exam is determined as follows:

Satisfactory

All three components of the examination are rated as satisfactory. The Committee believes the student is making good progress, has a well formulated Thesis Proposal and there are no major concerns. The Committee should determine either: (i) the date of the Ph.D. Thesis Proposal and Comprehensive Exam, normally within the next six (6) months, or (ii) whether the current meeting should be converted the Ph.D. Thesis Proposal and Comprehensive Examination Meeting.

Conditional

One or more of the components is rated as less than *Satisfactory*, and no more than one component is *Unsatisfactory*. The Committee believes that the student has the potential to develop a successful Thesis Proposal but that there are one or more areas of concern that the student must address. The Committee will impose one or more conditions, and a timeline for the student to fulfill them (normally no more than three (3) months). If the student fails to fulfill the conditions to the satisfaction of the Committee, within the time allowed, the student will be given an “Unsatisfactory” grade and must follow the procedure in the “Unsatisfactory” section below.

Unsatisfactory

Two or more components of the examination are rated as *Unsatisfactory*. The Committee deems that the progress to date and/or Ph.D. Thesis Proposal are not satisfactory. The Ph.D. Comprehensive Preparation Meeting must be repeated at a time determined by the committee and in accordance with our [unsatisfactory guidelines](#). If the result of this repeated meeting is still unsatisfactory, the student may be asked to withdraw from the Program.

Reporting

The Chair’s Representative will prepare a summary of the Committee’s findings and recommendations.

The student will be asked to return, whereupon the Chair’s Representative will communicate the Committee’s evaluation to the student and answer any questions. The Committee members and student will then sign the Ph.D. Comprehensive Preparation Meeting form.

Following the meeting, the Supervisor will prepare and circulate detailed minutes of the meeting documenting the Committee’s recommendations and advice to the student. This should be done no later than one week after the meeting. Once approved by the Committee members, the minutes will be added to the student’s file, attached to the meeting form. A copy will be provided to the student, Committee members and the Graduate Program Director.