



# **Department of Biomedical Engineering, Faculty of Medicine Ph.D. Comprehensive Preparation Meeting Policy and Procedures**

# **Objectives**

- Help the student prepare for the Ph.D. 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 the student will be responsible for in the Ph.D. Thesis Proposal and • Comprehensive Exam.
- Provide the student with practice in scientific writing, oral presentation and answering questions.

# Timing

The Ph.D. Comprehensive Preparation Meeting should be held six months after the successful completion 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.bme, before the date fixed by the Graduate Program Coordinator. 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 20 minutes, not including questions. Normally, the subsequent discussion period directly related to the proposal should last no more than 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 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 & Comprehensive Examination. Normally, the general competence part of the meeting should last no more than 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 till 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 & Comprehensive Meeting.

Given this context, each component of the Examination 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 the date of the Thesis Proposal and Comprehensive Exam, normally within the next six (6) months.

#### 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 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 Thesis Proposal are not satisfactory. The Comprehensive Preparation Meeting must be repeated at a time determined by the committee and in accordance with our <u>unsatisfactory quidelines</u>. If the result of this repeated meeting is still unsatisfactory, the student may be asked to withdraw from the Program.





# Reporting

The Chair's Rep will prepare a summary of the Committee's findings and recommendations.

The student will be asked to return, whereupon the Chair's Rep 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.