

Biomedical Engineering Program Policies and Procedures Preparation Meeting for Ph.D. Thesis Proposal and Comprehensive Exam

The 3rd Advisory Committee meeting, which is expected to be held no later than 18 months after the start of the program, will serve as the PhD Comprehensive Preparation Meeting. One member of the advisory committee should be selected to Chair the meeting.

Objectives

- Evaluate the student's academic and research progress.
- Assist the student in developing a Thesis Proposal in which the rationale and specific objectives are clearly defined and within the scope expected of a Ph.D.
- Select three basic knowledge topic areas to form the basis of questioning at the Comprehensive Examination
 - Guided by supervisor(s), the candidate will provide suggestions for five areas of basic knowledge to be examined at the Comprehensive exam. Committee agrees on three of these areas. (As an example, a student performing research in image-guided breast biopsy might be required to have knowledge on ultrasound and MR imaging techniques, breast anatomy and physiology, and biomechanical properties of breast tissue).
- Assignment of committee members to address each area during the comprehensive exam.
- Provide the student with practice in scientific writing, oral presentation and answering questions.

Procedure

The student should prepare a preliminary version of the Thesis Proposal (maximum of **5** pages, not including figures and references – See Appendix A of the Thesis Proposal and Comprehensive Exam Policy and Procedures) and circulate it to the Committee members **at least one week prior** to the meeting. This document should include:

- Overall objective of the Ph.D. work,
- Brief review of the relevant literature,
- Rationale for the proposed work,
- Summary of progress to date,
- Specific objectives,
- Description of the methods to be used,
- Timeline.

It is understood that at this stage many of these sections will still be in development.

At the start of the meeting, the Committee will meet without the student, at which time the supervisor will review the student's progress to date and flag any areas of concern.

The student will make an oral presentation of the preliminary Thesis Proposal and answer questions from the Committee members. The presentation should be no longer than 20 minutes, not including questions.

The student will then withdraw from the room, and the Committee will determine:

- The meeting outcome (as defined below),
- Identify any areas of concern and suggest corrective action,

- Re-evaluate, and modify as necessary, the knowledge topic areas for which the student will be responsible during the Thesis Proposal and Comprehensive Exam,
- Any other advice to be provided to the student,
- Based on the outcome (see below), set the date for the next meeting as appropriate,

The Chair will complete the collective Advisory Committee Report form (104) to be submitted to the BME office.

The candidate will be asked to return, whereupon the Chair will communicate the Committee's evaluation to the student and answer any questions. The Committee members and student will then sign the Advisory Committee Report form.

Outcomes

There are three possible outcomes to the meeting:

➤ **Satisfactory**

The Committee believes the student is making good progress and has a well formulated Thesis Proposal. There are no major concerns. The next scheduled meeting will be the Thesis Proposal and Comprehensive Exam, which is within six (6) months of the Comprehensive Preparation Meeting.

➤ **Conditional**

The Committee believes that the student has the potential to develop a successful Thesis Proposal, but there are one or more areas of concern that the student must address. The committee may impose one or more conditions that must be fulfilled prior to the next meeting. The student must submit a revised proposal to the Committee for approval within four (4) weeks of the initial meeting. Should the revised proposal not be accepted, the student will be given an "unsatisfactory" grade and follow the procedure in the "Unsatisfactory" section below.

➤ **Unsatisfactory**

The Committee deems that the progress to date and/or Thesis Proposal are not satisfactory. The Comprehensive Preparation Meeting must be repeated within four (4) months of the initial meeting. If the result of this repeated meeting is still unsatisfactory, the student may be asked to withdraw from the program.

Masters – PhD Transfer Meeting.

In the case of a student transferring from Masters to PhD, this meeting can also serve to confirm this reclassification.

Form(s) to bring to meeting:

Advisory Committee Report Form (104), and the Transfer to PhD form (103) (If appropriate)