Dissertation Instructions

- The candidate’s director names the committee and chooses the date and time of the Oral. The committee must sign and submit the BIOE PhD Dissertation Pre-Defense Form 4 weeks prior to the defense.
- Begin early in the term to meet deadlines.
- The candidate schedules a format review with University Dissertation & Thesis Services (UDTS) prior to the defense. See deadline.
- The committee Chair receives a packet containing these instructions, the two grading rubrics, and the BIOE PhD Dissertation Results Form.
- The candidate provides the written dissertation to the committee at least 4 weeks before the Defense.
- The candidate makes a 30-45-minute presentation at the Defense.
- Following the research presentation, the dissertation committee will ask the candidate several questions to evaluate the student’s understanding of research. The questioning generally begins with the external examiner and ends with the research director. Multiple rounds of questioning can occur. Once the committee’s questions are complete, other attendees have an opportunity to ask questions of the candidate.
- The candidate and other attendees leave the room to allow the committee to deliberate. The deliberations are presided by the chair of the committee who begins by asking the external examiner to evaluate the candidate. Other committee members then provide their evaluations ending with the research supervisor’s evaluation.
- All committee members assess the written dissertation and the oral presentation using the BIOE PhD Written Dissertation Rubric and BIOE PhD Oral Presentation of Research (Proposal and Dissertation) Rubric.
- The committee Chair completes the BIOE PhD Dissertation Results Form and returns it to the department.

Composition of Committee

Committees for dissertation proposal (and dissertation) consist of four or five individuals.

- A minimum of two members, including the chair of the committee, must be graduate faculty in the Department of Bioengineering.
- One member must be graduate faculty from outside the department.
- The chair of the committee is responsible for ensuring the correct forms are completed and procedures are followed.
- The dissertation director is the main scientist guiding the student’s research.
- The dissertation director cannot be chair of the committee.
- It is strongly recommended that one of the committee members be external to the university.
Refer to the catalog for who is allowed to be on these committees (see section AP.6.10.5 Dissertation Committee). The dissertation proposal committee has the same requirements as the Dissertation committee.

Dissertation

The dissertation should report on research performed by the candidate during their studies at Mason. Ideally, the main chapters of the dissertation are comprised of published manuscripts, submitted manuscripts, and the student’s final manuscript in preparation. The dissertation should include an introductory chapter, which gives a broad overview of all the research, and a concluding chapter, which summarizes the main findings of the body of work and outlines future directions suggested by the research. Additional guidelines are provided in the BIOE PhD Written Dissertation Rubric. Format of the Dissertation is determined by University Dissertation & Thesis Services.

Oral Presentation

The candidate must present the Dissertation to committee in a venue open to the public. The oral presentation should include a general introduction and background to enable understanding by a broad audience. Explanation of the candidate’s research should focus on the most significant results with easy to understand graphics. Additional guidelines for preparing the presentation are provided in the BIOE PhD Oral Presentation of Research (Proposal and Dissertation) Rubric.

Grading

The Dissertation and oral presentation are graded according to rubrics, and the results are reported on the BIOE PhD Dissertation Results Form. If the dissertation committee feels the Dissertation does not make a sufficient contribution, or that the oral presentation was inadequate, the committee may request further research or require a repeat of the oral presentation.