## Comprehensive Examination for PhD students in the MEES program

All MEES PhD students are required to pass a comprehensive examination, which consists of both a written and an oral portion. The written portion is taken first, followed by the oral portion contingent on committee acceptance of the written portion answers (see below). The comprehensive examination must be successfully completed before the dissertation proposal defense and subsequent advancement to candidacy, so it is in the student's best interest to take the exam as early as possible. Typically, the comprehensive examination will be held at the end of the student's second year (4<sup>th</sup> semester) after they have completed most of their coursework. The exam must be taken by the end of the student's third full-time year (sixth full-time semester), or equivalent for a part-time student. Both the written and oral portions of the comprehensive exam should be scheduled ahead of time, separated by at least two weeks but no more than six weeks, if possible.

The comprehensive examination is intended to determine whether the student demonstrates sufficient evidence of scholastic and intellectual ability in their chosen field of research, as well as an interdisciplinary breadth of knowledge characteristic of the MEES program, to continue working towards their MEES PhD degree. The comprehensive examination is not a defense of the PhD research proposal.

The student's research advisory committee is responsible for coordinating areas of examination, with each committee member providing written questions about different relevant disciplinary or interdisciplinary subjects; at least one committee member should ask interdisciplinary questions and all committee members are encouraged to do so. The student and each committee member should meet at least 4 weeks before the written exam to communicate about the subject, scope, and format of questions to be asked. Each committee member should indicate at that time whether their question(s) will be open or closed book and to what extent the use of technology is allowed. Committee members also may suggest reference materials if appropriate, but they should not provide specific exam questions to the student before the exam. Committee members should submit their questions to the student's advisor before the beginning of the written exam. The advisor will be responsible for collating the questions, administering the written exam and sending student responses back to the committee members for grading.

The written portion of the comprehensive exam usually is taken on consecutive workdays. The total examination time should be at least three but not more than five workdays. Committees with more than five members should coordinate questioning to fit within the five-day limit. The MEES office must be notified of dates and committee members at least two weeks prior to the written examination. The advisor should provide each day's questions to the student at the beginning of the day and collect their answers at the end of the day. Within one week of the end of the written exam, all committee members should inform the advisor whether the student's answers were acceptable to proceed to the oral examination. A copy of the compiled written exam questions, student answers, and committee responses must be provided to the MEES office. The student may also ask for feedback from committee members. To proceed to the oral exam, the student must receive at minimum four "accept" votes. If fewer than four "accept" votes are received, the student fails the written examination and cannot proceed to the oral

examination. A student who fails the written examination may take it again within 1 year, but no sooner than 6 months after the initial examination.

The oral examination is designed to probe in more detail the student's responses to the written examination, but other relevant topics may also be discussed. All members of the research advisory committee are required to attend the oral examination either in person or virtually. The advisor moderates questioning during the oral examination. The length of the oral examination may not exceed 3 hours. The research advisory committee should meet privately at the beginning of the oral examination to coordinate among themselves, and again at the end to determine whether the student's performance on the entire exam was satisfactory or unsatisfactory. A minimum of four satisfactory votes are required for the student to pass. A MEES Report of Examination form must be signed by all committee members and filed with the MEES office within two weeks of the oral examination date. If a student fails only because of their performance in the oral portion of the examination, the committee may approve retaking the oral examination within 1 year.

If a student fails the comprehensive examination twice, matriculation in the MEES PhD program will be cancelled. In this circumstance, the student may appeal to the MEES Director, who will convene a committee of independent MEES full graduate faculty members to review the examination materials and decisions and make a final pass/fail decision.