

The comprehensive exam is an assessment of student's competency to carry out the proposed PhD research. The exam focuses on the fundamentals of engineering science relevant to the area/topic of research and the appropriate tools/methodologies to conduct the proposed research.

The comprehensive examination consists of two parts: proposal and oral examination. The procedure for the comprehensive exam is described as follows:

1. The comprehensive examination form must be submitted to the MME Graduate Office in the third (3rd) term of registration, and the exam **must be taken before the end of the fourth (4th) term**. The examining committee is proposed by the candidate's supervisor and will include a minimum of three (3) members, one of whom may be external to the department.
2. Student submits a written proposal of his/her Ph.D. research to the MME Graduate Office, three (3) weeks prior to the scheduled comprehensive examination date. The proposal must only be written on the template available on our [program website](#). Any proposal that is not written using this template will not be accepted by the graduate office.
3. Examiners review the proposal and submit the completed assessment rubric (with scores) to the Graduate Office no later than one (1) week prior to the oral examination date.
4. The committee decision is made based on the average scores from the examiners. The Graduate Chair collects the scores from the examiners and convey the outcome to the student.
5. If pass, the oral examination proceeds as planned. Otherwise, the oral examination is cancelled and the re-submission of the proposal is required.
6. The revised proposal must be resubmitted no earlier than three (3) weeks from the date of the assessment result of the proposal is conveyed to the student. The oral examination should be rescheduled to a date at least three (3) weeks after the proposal resubmission date.
7. During the oral examination, the candidate must make a short oral presentation (15 minutes) on the research project at the beginning of the examination. This will be followed by questions to the candidate from each member of the committee. The oral examination is closed.
8. The committee decision on the oral examination is based on the average scores from the examiners. The results of the examination shall be stated as:
  1. Passed without conditions, or
  2. Passed with specific conditions to be satisfied for continued registration, or
  3. Failed (with oral re-examination, required to withdraw, or recommended to transfer to MESc)

A student who fails the first attempt at the comprehensive examination may be required to withdraw, transfer to MESc program or may be allowed to attempt the oral examination again. The re-examination may not take place before three (3) months, but must be completed by the end of the fourth (4th) month from the original oral examination. A student who has passed with conditions but fails to satisfy the conditions shall be required to withdraw.

The assessment rubrics for both written proposal and oral examination are on our [program website](#), which can be used as guideline to prepare your written proposal and oral examination.