DEPARTMENT OF BIORESOURCE ENGINEERING Ph.D. COMPREHENSIVE EXAMINATION (BREE 701) GUIDELINES

The Comprehensive Examination is a formal evaluation of the student's ability to proceed to the attainment of the Ph.D. It is intended that the examination will focus on the subject of the student's proposed research. The relevant background knowledge in this area, as well as in allied areas, will be ascertained. Students preparing for the examination should become familiar with all areas that might be relevant to an effective pursuit of the proposed research. The questioning will usually cover technical and strategic issues as well as substantive knowledge. Although the examination is not intended as an assessment of the student's research accomplishment, those students who have accumulated results should present them. Questions arising from these results may then form part of the examination.

Specifically, the following criteria are considered relevant to the student's preparedness for the Ph.D.:

- 1. Originality of ideas
- 2. Practicality of approach to the research problem
- 3. Depth of understanding of the research field
- 4. Grasp of relevant allied research areas
- 5. Potential for scholarship

Students taking the examination must be registered for it in the term in which it is taken (Course BREE 701). New Ph.D. students should pass the examination no later than 24 months from the date of entry into the program.

The Examining Committee consists of at least five persons including the Supervisor and Graduate Program Director of the department (or designate). At least one member must be external to the department. The Graduate Program Director (or designate) of the department will preside over the committee.

Candidates must submit a thesis proposal (approximately 15-20 pages single-spaced 12-point) in advance of the examination. It is the student's responsibility to provide each member of the Examining Committee, as well as the Graduate Program Coordinator, with a copy of the proposal at least 7 days prior to the 24 hour take-home examination. The proposal serves two purposes. First, it defines the research area and thus forms a basis for questioning. Second, it is itself part of the evidence upon which a final evaluation will be made. For these reasons, it should be written with care.

The supervisor will request that the examiners submit one or more prepared questions to him or her in advance of the examination. These questions will be collected to create two 24 hr. take home examinations for the student. After satisfactory completion of the written examinations the candidate proceeds to the oral examination.

The oral examination chaired by the Graduate Program Director (or designate) who is a non-voting member begins with the student making a brief presentation of the research proposal (15-20 minutes). Questioning then proceeds with each examiner usually asking questions in turn.

After the questioning, the student will be asked to leave the room. The committee will then discuss the candidate's strengths and weaknesses as evidenced by the written and oral examinations. The decision on the candidate's overall performance should be reached by a consensus of the committee whenever possible. An affirmative vote by a majority of the voting members is required for a pass. A copy of the Committee's Report, which will contain a brief summary of the candidate's strengths and weaknesses, as well as suggestions for improvements to the proposed research, will be given to the candidate.

In the event of an unsatisfactory performance, the opportunity to try a second (final) examination will be made available to the candidate. The second (final) examination can take one of several forms, at the discretion of the Examining Committee but will be designed to address the weaknesses identified by the examining committee. It may be written or oral. It may cover the same material as the original examination or it may be limited to certain subject areas. The student may be asked to write additional materials or a review on a specified subject, or to revise the thesis proposal. The Graduate Program Director of the Examining Committee is responsible for conducting the second (final) examination. The exact nature of the second (final) examination, the procedures to be followed, and the method of evaluation must be communicated, in writing, to the student as well as to all committee members, preferably on the Committee Report form. The second (final) examination should be completed within a specified time of not more than 12 months. Failure of the second (final) examination (unsatisfactory performance) will result in the student being required to withdraw from the Ph.D. programme.