GUIDELINES FOR CANDIDACY EXAMINATIONS FOR DOCTORAL PROGRAMS IN SCIENCE AND ENGINEERING

A. The Candidacy Examination

1. Each student in a doctoral program in science or engineering is required to complete a Candidacy Examination.
2. The examination is normally conducted during a candidate’s fourth term of residence, and must be held no later than 20 months from the date of initial registration.
3. The examination consists of two parts: (i) a written examination of three hours duration, the questions to be set by the student’s Supervisory Committee; and (ii) an oral defence of (a) the written examination, and (b) dissertation proposal.

B. The Examination Committee

1. The examination committee normally includes the members of the candidate’s Supervisory Committee. Up to two other persons may be included at the discretion of the Supervisor in consultation with the candidate. The Graduate Program Director (or delegate) serves as Chair of the Committee.
2. The Candidacy Examination is to determine whether the candidate has the appropriate knowledge and expertise to undertake a dissertation in the selected field or area of study.
3. The examination committee decides (by majority vote if necessary) whether the examination is “pass” or “fail”. A student may be granted a “pass” even though some small weaknesses are identified -- if it is considered that these may be remedied quickly. In such cases, a plan of remediation is to be designed by Supervisor and student, and satisfactory completion of the plan is to be attested by the Program Director.
4. If the examination committee evaluates a “fail”, an “UNS” (Unsatisfactory) grade designation will be assigned for the dissertation for that term.
5. The candidate will be granted a second opportunity to attempt the exam after a period of at least three months, but not more than six months.
6. A second “UNS” (Unsatisfactory) grade will result in a grade performance designation of “F” and the student will be withdrawn from the program.

C. The Written Examination

1. The written examination is designed to ascertain a candidate’s understanding of the basic theories, and recent developments of both a theoretical and applied nature, in his/her field or area of study. This understanding must exhibit both articulate comprehension and critical exposition.
2. During the course of the written examination, the candidate must indicate the ways in which the proposed dissertation links with previous research in the area and advances knowledge in the field.

D. The Oral Examination

1. The Oral Examination is held within two weeks of the written examination.
2. The oral commences with the candidate’s presentation (with illustrations) of her/his dissertation proposal. This oral presentation includes a discussion of the hypotheses to be investigated, situate these (briefly) in the context of recent methodological developments in the field, outline the nature and availability of the equipment and/or computational devices required, and indicate the ways in which the research should provide both advances in the field and real or possible applications.
3. The oral questions of the Examination Committee will then relate to the candidate’s comprehension and critical understanding of his/her selected field of expertise. A basic premise of the examination is that the research must result in work of either publishable quality (in a recognised peer reviewed journal), or patentable material, or both.