

# UBC OKANAGAN SCHOOL OF ENGINEERING

## PHD CANDIDACY EXAM PROCEDURES

See Revision Notes at end of document.

### Exam Committee Structure

**Chair** The chair will be appointed by the Associate Director of Graduate Studies and Research and will typically be a tenured Associate or Full professor in the School of Engineering. The chair is a procedural position and will make sure the exam is conducted in an equitable manner, will take notes (discuss them with the committee after the student leaves) and will gather the signatures on the forms.

**Supervisor(s)** If there is more than one supervisor, they act as one and together have one vote. However, each of them signs the forms. They will alternate questions during the question periods. One supervisor can ask a question each round of questioning.

### **Two supervisory committee members**

**Candidacy Examiner** The principal purpose of the candidacy examiner is to provide transparency to the candidacy exam. The following 9 items govern the choice and function of the candidacy examiner.

- 1) The candidacy examiner must be external to the program of the student and supervisor (where program is defined as one of the UBC Okanagan SOE programs of Civil, Electrical, and Mechanical Engineering).
- 2) Faculty members in Civil, Electrical and Mechanical Engineering at UBC Vancouver are considered external to the corresponding programs at UBC Okanagan.
- 3) The candidacy examiner must not have been involved in the student's PhD work in any way.
- 4) The candidacy examiner must be able to ask at least fundamental questions about the proposed PhD work.
- 5) The Associate Director of Graduate Studies and Research must approve the supervisor's choice of candidacy examiner.
- 6) The candidacy examiner is NOT required to become part of the supervisory committee.
- 7) The candidacy examiner may participate via videoconferencing.
- 8) The candidacy examiner is NOT eligible to be the university examiner on the student's thesis defense committee (as per College of Graduate Studies policy).
- 9) The candidacy examiner is NOT eligible to be the external examiner on the student's thesis defense committee (as per College of Graduate Studies policy).

1. Written Proposal – due two weeks before the exam date. This document is part of the proposal defense. It should have a problem statement/objectives/hypothesis, a literature review, a summary of research completed to date including methods, a plan for future work including methods. See template for further clarification. A 30 page limit is suggested.

2. Oral exam – The oral exam will be scheduled for 3 hours. It will likely take between 2 and 3 hours.

The student should start the exam by presenting a summary of the proposal material in approximately ½ hour (typically 30 power point slides).

The question period will then begin. The questions will be asked in rounds each round will be focused on either a) the proposed research, or b) the comprehensive or fundamental knowledge required to perform and understand the research.

a) The questions regarding the proposed research should be directed towards an agreement between the student and the committee that the proposed research and methodologies are sufficient that, if performed, will constitute the requirements of a successful PhD research project. The responses to the questions and or points raised will contribute to the proposal defense result.

b) The questions regarding comprehensive or fundamental knowledge are directed towards a determination of the preparedness of the student for PhD studies. This includes theoretical background for the proposed research and the ability of the student to think critically. The responses to these questions will contribute to the candidacy exam result.

The student can bring and refer to any written material they feel could be of use including text books, class notes, journal papers etc. The questions should take no longer than 5 minutes to answer. Students may use the board, calculator, pen and paper etc.

When the question period is over, the student will be asked to leave the room (but not go too far). The committee will then discuss the exam results, confirm the comments the chair has noted down and sign the forms. The Chair will then invite the student back in the room and verbally inform the student of the results of the exam.

The proposal defense will be graded a) Pass, b) Pass with changes to the work plan, c) Fail. The student may retake the proposal defense once and it must be done within 6 months.

The comprehensive exam will be graded as follows. a) Pass, b) Pass with additional readings/courses, c) Fail. The student may retake the comprehensive exam once and it must be done within 6 months.

The forms should be given to the Graduate Studies administrative assistant for who will make a copy for the student file and submit the forms to the College of Graduate Studies.

Revision Notes:

Revised Dec. 7, 2012 by R. Klukas based on a motion passed by the Faculty Council of the School of Engineering on Dec. 5, 2012. (Changes to the Candidacy Examiner)