FACULTY
OF APPLIED
SCIENCE &
ENGINEERING

Ph.D. Qualifying Exam - Advice on how to write a 10 page research proposal

The research proposal must be double-spaced, single-sided, and no longer than 10 pages (including figures, tables, and a short list of references). Given the 10 page limit, the committee will obviously expect that a student be able to expand on the information in the proposal during the exam.

The research proposal should include the following elements:

- 1. a brief **INTRODUCTION** to the topic of the research program.
- 2. a clear and concise statement of the **OBJECTIVE(S)** of the research program. Be specific; do not simply write that you plan to "study" a certain phenomena.
- 3. a list of the key **FUNDAMENTALS/PRINCIPLES** on which the research is based.
- 4. a clear description of the novel **CONTRIBUTION** of the work to this field of research (i.e. what exactly is new?) This will often take the form of a description of the current state-of-the-art, followed by a description of how the proposed research will extend/improve on that.
- 5. a clear statement of the **RELEVANCE** of this research work. How can/will the results be used?
- 6. a clear statement of the major tasks to be performed in the research program, plus an estimated **TIMETABLE** for completion of each task. The proposal would provide a credible explanation of how each task will be accomplished. The proposed timetable should allow the student to complete the PhD within four years of initial registration.
- 7. a description of **PROGRESS** to date.

The proposal must be distributed to the Ph.D. committee at least ten working days before the qualifying exam.