THESIS PROPOSAL:

The Thesis Proposal will be reviewed and approved by the Advisory Committee within the first 12-15 months of the PhD program. It will consist of 10-15 page (double spaced) proposal including:

- Background and Problem Definition - to set the context of the proposed research. It should start with a big picture and narrow down to the questions to be answered through research.
- Objectives - in form of hypothesis or research question.
- Review of Literature - to briefly establish what is the state-of-the-art.
- Proposed Methodology – broad overview of candidate’s approach, tools, experimental design and data analysis including assumptions and limitations.
- Timeline – anticipated schedule to completion (Gantt chart).
- Significance of the proposed research – novelty and applicability of candidate’s work.

The PhD student will give a 20-25 min presentation on the Thesis Proposal. The Advisory Committee may ask questions of clarification or offer suggestions for modification of the research objectives and/or proposed methodology. The thesis proposal presentation shall not be viewed as an oral examination that must be passed. The purpose is to set the direction of the students’ research with input from the Advisory Committee. The Thesis Proposal Form is to be signed by the members of the Advisory Committee when all are satisfied with the proposal.
CANDIDACY EXAMINATION:

The Candidacy exam will be completed within the first 36 months of the PhD program.

Candidacy Examination Committee: The Candidacy Examination Committee will consist of the student’s Advisory Committee and is to be chaired by the Graduate Chair or Department Head.

Written report: The PhD student is to submit to the Chair of the Candidacy Examination Committee, a written document that includes:

- Introduction – Problem definition, background and objectives (better defined and descriptive than what was in the thesis proposal).
- Literature review – A comprehensive review of relevant literature related to thesis. It could also include a review paper the student may have been written by now.
- Methodology – Detailed account of experimental design, procedures followed and scientific approach used thus far to conduct experiments and analyze data.
- Results - Preliminary data analysis and discussion of the results in the context of thesis objectives.

The report should not exceed 50-pages (double spaced). The Chair will forward the report to the members of the Candidacy Examination Committee.

Written Examination: After reading the report, each member of the Candidacy Examination Committee will submit to the Chair one or more questions to be answered by the PhD student in an open-book, take-home examination. The PhD student will return the written answers to the Chair of the Candidacy Examination Committee within 10 days. The Chair of the Candidacy Examination Committee will provide each member of the Candidacy Examination Committee with the answers to his/her submitted questions.

Oral Examination: The oral examination is to be scheduled soon after the Candidacy Examination Committee receives the answers (preferably within 14 days). The PhD student will give a 20-25 min presentation summarizing the written report. The Candidacy Examination Committee may i) seek further clarification of answers that were provided in the written portion of the examination or ii) ask additional questions intended to gauge the Candidate’s knowledge in the area of intended research.

Reaching a Decision: The Candidacy Examination consists of two parts (i.e., a written portion and an oral portion) that together comprise the Candidacy Examination. Upon completion of both the written and oral portions, the Candidacy Examination Committee will decide whether the student has passed or failed the Candidacy Examination. Each examiner is responsible for assigning a grade of pass or fail based on the combined responses from the written and oral portions of the examination. The decision of the Candidacy Examination Committee must be unanimous to grant a pass. The student will be informed of the decision of the Candidacy Examination Committee immediately following the Candidacy Examination Committee’s deliberations. If the student fails the Candidacy Examination in the first attempt, a second attempt will be allowed. The repeat attempt would normally be scheduled within 1 month and would include both the written and oral portions of the Candidacy Examination.