PhD in Computing and Information Sciences
Dissertation Proposal Process

Policy and Guidelines
Approved on May 10, 2012
Updated on March 20, 2014

POLICY

The Dissertation Proposal is intended to explain a student's dissertation research direction and to convince faculty that the student is prepared to conduct this research. It should be written and defended after the student completes coursework, within 24 months of completing the Research Potential Assessment. The proposal must be approved prior to beginning the final dissertation research.

Before beginning work on the Dissertation, the PhD student will follow this process:
  (a) Form a Dissertation Committee consisting of a minimum of four members including the student's Advisor. A majority of the committee members must be members of the Ph.D. faculty in Computing and Information Sciences. The committee will meet the criteria established in the *Guidelines* below.
  (b) Submit a Dissertation Proposal to the committee (to be shared with the PhD faculty at large). The Proposal will be submitted at least three weeks prior to the scheduled defense.
  (c) Present and defend the Proposal to the committee and the PhD faculty at large in an open forum. The defense allows for revisions to the proposal and a possible re-presentation.
  (d) Gain unanimous approval from the committee and the PhD Director.
  (e) The committee will provide a written summary of the quality of the proposal that addresses the four program objectives of the PhD program. The summary is to be submitted to the Program Director and the Curriculum and Assessment Committee for quality control and program assessment purposes. It is not to be shared with the student without approval of Dissertation Committee and PhD Director.

  The four program objectives that should be addressed in the written summary are:
   1. Ability to describe and explain the general literature of the discipline of computing and information sciences.
   2. Ability to apply knowledge from the literature of their area of specialization.
   3. Ability to critically evaluate existing research, to propose new viable research directions, and to perform original work.
   4. Ability to explain technical material via written reports and oral presentations.

GUIDELINES

A typical Dissertation Proposal is expected to be approximately 20-40 double-spaced pages. It is assumed that much of the proposal will be re-usable in the final dissertation.

The Dissertation Proposal should especially focus on describing the value of the new work and the history of related research, along with the general methodological approach towards completing the project. The following format is advisable, although not absolutely required of all proposals. The student's Dissertation Committee may (with justification) alter the structure of the written proposal.

Suggested Format for the Dissertation Proposal

1. *Title.*
2. *Problem Introduction.* To what general area of *Computing & Information Sciences* does this apply? What are the issues? Why is this area important? What contribution (theory, practice, methodology) would this make to the field?
3. *Literature Review.* Although the work is original, it will "stand on the shoulders" of others. What are the major existing areas that this work is based upon? What previous thinking exists? The student should show awareness of the broad body of research that exists, should be conversant in debates and unresolved issues.
4. *Research Questions.* What question(s) do you intend to answer?
5. *Methodology.* How will the student go about answering the research questions? If human subjects are needed, how will they be selected? Are the needed tools available (computer networks, hardware, etc.)? What will be built or created? (Testing protocols, programs, treatments, etc.)
6. *References.* This should include all references in the proposal.

Dissertation Proposal Committee Membership

A. The Committee is formed with the consent of the student's Advisor.

B. Committee members must have a PhD or other terminal degree and background relevant to the topic area.

C. The names of Committee Members along with a brief summary explaining the contribution to the area of research from each committee member is submitted to the PhD Director.

D. The Committee Membership is reviewed and approved by the Director and the Curriculum and Assessment Committee.

E. Any changes to the Committee membership must conform to these guidelines including submission and review of qualifications.