## Doctoral Candidacy Assessment in Computer Science and Applied Computing Form

The purpose of the PhD Candidacy Assessment is to ensure that a student is sufficiently prepared for PhD research and for writing a PhD dissertation. The Annual Review of Status form will be completed at this meeting, and minutes will be taken in it. The format of the Candidacy Assessment is described at the end of this document.

For each of the following criteria, assess whether the oral and written portions of the candidacy assessment is satisfactory or not:

satisfactory: non-satisfactory:

the student has demonstrated sufficient understanding of the current knowledge of the research frontier in their area of research needed to perform new research in the area;

satisfactory: non-satisfactory:

the student has demonstrated that there are sufficiently many open questions in the area for their doctoral work;

satisfactory: non-satisfactory:

the student has the ability to satisfactorily defend and justify the proposed methods for achieving the research objectives and/or testing the research hypotheses;

satisfactory: non-satisfactory:

the student has shown that the proposed topic and research are appropriately novel and would, if successful, contribute towards the broader field; and

satisfactory: non-satisfactory:

the student has the ability to effectively communicate existing and proposed research in both written and oral form.

## Overall Outcome

The outcome of this meeting is that the Doctoral Candidacy Assessment is either satisfactory or unsatisfactory.

satisfactory: non-satisfactory:

Comments:

Does the Advisory Committee also believe that this Candidacy Assessment fulfills the requirements of the PhD Thesis Proposal?

Yes: No:

A student that successfully completes the candidacy assessment is deemed a doctoral candidate (e.g., Ph.D. Candidate). The student's official transcript will note the date when the candidacy assessment was satisfied. After this point, their focus will be on completing the doctoral research and dissertation.

A student that does not satisfy the requirements of their candidacy assessment is permitted a second attempt at the recommendation of the academic unit and with the permission of the Dean of the CGPS or designate. A second unsatisfactory outcome will automatically result in a requirement to discontinue from that doctoral program. An unsatisfactory candidacy assessment, and/or the denial of a second attempt at the candidacy assessment, may be appealed to the Graduate Academic Affairs Committee of the CGPS on substantive grounds in accordance with Part IV of University Council's *Procedures for Student Appeals in Academic Matters*, or on grounds other than substantive academic judgment limited to those outlined in Part V.B.1.

## **Format**

The proposed Doctoral Candidacy Assessment will involve the Ph.D. student preparing a document, giving a presentation to the Advisory Committee, followed by a question period. The document will contain a proposed research topic, background literature relevant to the proposed topic, together with a preliminary proposal.

Specifically, a written document of at most 30 pages is prepared by the Ph.D. student and will be comprised of:

- An introduction to a proposed thesis topic;
- A literature survey that discusses relevant works, and identifies necessary future research directions in the area of the proposed topic (20 pages maximum);
- A preliminary proposal, which will include:
  - o research objectives and/or hypotheses;
  - o a dataset plan (if appropriate) that includes identification of relevant datasets that could be used in the proposed research and/or a plan to create or curate such datasets; and
  - a description and justification of methodologies that could be used to achieve the research objectives or test research hypothesis including potential measures of success
    - AND/OR
    - a description of what will be built/developed and metrics to measure success; and
- A discussion of how the proposed research fits within the existing literature with an emphasis on demonstrating the novelty of the proposed research.

The student will give a presentation of between 15-20 minutes on the existing literature and their proposed research objectives. Then there will be a question period to test the depth of knowledge in the area, and to examine whether the preliminary proposal is appropriate towards a Ph.D. To note, this preliminary proposal is considered "non-binding" and the research objectives can change afterwards. (This is distinct from the Ph.D. Thesis Proposal discussed below). However, if the Advisory Committee unanimously believes that this preliminary proposal is sufficient to satisfy the requirements of the Ph.D. Proposal, then the student can pass the Ph.D. Thesis Proposal at the same meeting.