

Qualifying Oral (before month 12)

First year PhD students will be required to take a Research Skills seminar that will serve a dual purpose. First, it will guide them through the process of preparing the document for their qualifying oral exam. Second, it will cover topics that are of general importance for all CS PhD students irrespective of research areas (e.g., communication skills, how to prepare a good survey, how to select a research topic, how to apply for a grant/scholarship, planning a successful PhD carrier, the academic job search, how to put together a poster, how to give a good conference talk, how to write a good conference/journal paper). A committee will coordinate the seminar, and different DCS faculty members will deliver lectures.

During the semester, the students will develop their qualifying oral document, which will consist of a survey of 10 important research papers in one research area. The survey should address points (b) through (g) as outlined in Allan's original proposal in a maximum of 6,000 words (not including references). To encourage progress toward this goal, the seminar will have milestones with clearly outlined due dates. For example: week 2 – select papers; week 5 – read all papers; week 7 – survey outline; week 10 – initial draft for peer review (by other students in the class); week 11 – return comments of initial draft; week 12 – second draft.

The seminar will be offered in the Spring. During the Fall semester, students should choose an advisor and select an area to focus for the qualifying oral. It is anticipated that most (if not all) of the qualifying oral document will have been written by the end of the seminar, and that students will be ready to proceed to the exam shortly after. It is proposed that students be required to take the exam within 3 months of finishing the seminar. Students that fail the exam will be expected to present it again within 4 months of the first attempt.

It should be emphasized that the objective of the qualifying exam as outlined above is to teach the student general research skill that they will require to succeed as a CS PhD student, and to test their ability to comprehend and discuss in depth a specific research area. While they may identify their PhD topic as a result of this exercise, this is not an expressed objective.

Yearly Progress Review (every 12 months thereafter)

Following the successful completion of the qualifying oral, the student will meet with their committee every 12 months. The purpose of the meeting is for the committee to determine if the student is following a trajectory that is likely to result in a successful PhD Thesis, and to propose corrective action otherwise. In preparation for the meeting, the student will provide a document outlining their progress over the past year and their objectives for the following year. The document should be at most 3,000 words long. The student will then give a 20 minutes talk describing their work and future plans. A student in the right trajectory will show progress toward thesis completion by achieving (over time) milestones such as: performing independent research, obtaining preliminary results, identifying a thesis topic, publishing part of their work, etc.

If the progress of the student is considered unsatisfactory, the committee will formulate a set of requirements that the student should meet in order to regain their satisfactory status. The committee will reconvene within a period of 6 months to re-evaluate the student. If after this period the student status remains unsatisfactory, the committee may advise the Graduate Office to terminate the student's registration. Alternatively, the committee may give the student a one-time 6-months extension to correct their status.

Scheduling the Yearly Progress Review is the student's responsibility. Failure to schedule a review will automatically lead to an unsatisfactory status.

PhD Candidacy

Students achieve PhD Candidacy following the progress review where they: (1) complete their course requirement; and, (2) get approval from their committee for their thesis topic.

Thesis Proposal

The student should sketch the expected contents of their thesis. Some work should have been completed by this point, and a plan should be in place for remaining topics to be investigated. A short paper describing the current state of the research, and the expected results, is required. This could simply take the form of a table of contents for the proposed thesis, along with one or more short conference style papers, which describe the results to appear in specific chapters, plus a brief sketch of remaining work. The student will give a 20 minute talk to be given at the beginning of the committee meeting.

On the year it takes place, the Thesis Proposal replaces the Yearly Progress Review.

Departmental Thesis Defense, and Final Oral Exam

No changes proposed.