RIT Chester F. Carlson Center for Imaging Science
Ph.D. Written Qualifying and Candidacy Exam Process

General Information

• Students are admitted into either the MS or PhD program. MS students who are considering the PhD are advised to take all core courses offered during the first year.

• Students in the PhD program are allowed to continue after passing the qualifying exam. PhD students are permitted two attempts at the qualifying exam. If they do not pass the exam they are advised to changed into the MS program and complete that degree.

• Students in the MS program are permitted to take the PhD qualifying exam if they so choose. If they pass they may be changed into the PhD program pending approval of the Graduate Program Coordinator and the commitment of a faculty advisor.

• Example written qualifying exam questions from the past five years are posted on the CIS website under Graduate Programs.

Ph.D. Written Qualifying Exam

• The written qualifying exam covers material from the first year core courses and the graduate laboratory.
  - For the typical student the first attempt occurs after the first year in the program.
  - Questions are designed to probe the student’s ability to integrate core course material and stress a systems approach.

• Written exam composition and administration.
  - The exam will be administered approximately June 15 each year.
  - The exam will consist of a three-hour session in the morning followed by a three-hour session in the afternoon.
  - Students will answer 2 out of 3 questions for each of the first year core courses. All students will answer 2 questions related to the graduate laboratory including a system description/operation question and a question related to the student’s specific area of responsibility in the project. Each question is designed to take about 30 minutes to answer. No notes are allowed.

• The written exam will be compiled and administered by the Graduate Program Coordinator.
  - The instructors of the previous year core courses will submit questions to be reviewed and approved by a subcommittee of the Graduate Curriculum Committee.
  - The exams will be graded by members of the Graduate Program Faculty. All Graduate Program Faculty are strongly encouraged to participate in the exam grading.
  - The student answer sheets shall be coded such that the student answers will be anonymous during the grading process.

• Written exam grading and decision making.
  - Each question shall be graded by two faculty members, usually the question originator and another member of the Graduate Program Faculty.
  - The Graduate Program Coordinator will compile all grades and present to the faculty for review and discussion. The faculty will submit outcome recommendations to the CIS Director.
  - The CIS Director finalizes the results and then communicates the decisions to the students with a nominal deadline of June 30.
• Decision Ramifications.
  - Upon passing, Ph.D. students may continue in the Ph.D. program; student and advisor proceed with their research and move forward to the next milestone of the Ph.D., the Candidacy exam.
  - If student does not pass, the student has two options.
    o Complete additional exam questions to be determined by a faculty committee to be appointed by the Graduate Program Coordinator. The committee shall include the student’s advisor.
    o Pursue MS.
  - Pass or fail, the student must identify a research advisor and submit an updated Plan of Study within 3 months following announcement of decisions from the written exam.

**Ph.D. Candidacy Exam and Dissertation Proposal**
• The candidacy exam (proposal defense) consists of a written dissertation proposal and an oral presentation by the student followed by questions by their PhD research committee.
• The Candidacy Exam is administered by the student’s research committee that includes the advisor, an outside Chair, and a minimum of two additional committee members.
• The written dissertation proposal shall be circulated to research committee members at least 2 weeks prior to the candidacy exam.
• Only students who have passed the Ph.D. Written Qualifying Exam are eligible to take the Candidacy Exam.
• The Candidacy Exam is typically held after two years of full time research but must be passed a minimum of 6 months prior to final thesis defense.
• Upon passing the student is advanced to Ph.D. candidacy.
• If a student does not pass the candidacy exam, they shall be advised to complete an MS.

*See accompanying flowchart.*
Imaging Science
Ph.D. Qualifying and Candidacy Exam Milestone Flowchart