

Qualifying Examination

Computer Science, PhD

Ph.D. candidates are expected to pass a qualifying examination, normally by the first semester of your third year in the program. If failed, the exam may be retaken once, by the end of your third year.

The examination is expected to have a written and an oral component and to demonstrate (1) in-depth knowledge of the student's specialization, (2) knowledge of some other area of computer science, (3) academic writing competence, and (4) the ability to defend a position in an oral setting.

The format of the examination will be determined by your advisory committee, but will follow these requirements:

- You and your committee agree on a set of three topic areas, including two within your area of specialization, which must be approved by the director of Ph.D. studies.
- You will be examined on each topic through either a conventional written exam or a paper that answers a specific question within the topic.
- The examination must include at least one written paper; if two or more papers are written, they should reflect different methodological approaches to the content area (mathematical analysis, simulation, programs, experiments, etc.).
- You have three months to prepare for the exam, normally during the summer following your second year in the program. You may consult previous works related to the topics but may not discuss them with other colleagues or your advisory committee.
- For a conventional written exam, each committee member writes 1-2 questions, and you have two days, four hours per day to answer them, using any resources you wish to bring to the exam room.
- Within three weeks of the written exam, you will meet with your committee to orally defend your answers and respond to follow-up questions.
- If the committee finds your written and oral answers satisfactory, you pass. You may also be required to provide further written elaboration to one or more questions before passing.
- For topics examined via written paper, you will be required to meet with your committee to defend your paper orally, normally within a week of its submission. This defense is open to School of Informatics and Computing faculty as observers, but the decision to pass lies solely with your committee.
- Following an oral defense of a written paper, you may be asked to rewrite the paper and possibly meet with the committee again for a second oral defense.