Qualifying Process

To qualify for the doctoral program, students must satisfy course and GPA requirements and pass the qualifying examination, which consists of two parts taken in sequence.

- Part 1 tests for breadth of knowledge in computer science and the ability to use that knowledge.
- * Part 2 tests for the knowledge and ability to begin research.

Qualifying Course and Grade Requirements

Students, except as stated under Exceptions, must complete four of the 50000 -level courses (12 credits) listed in the Areas and Courses Table with grades of A or B. The choice of these four courses depends upon the interest of the student but is restricted by the availability of the courses and must include:

- Artificial Intelligence, Data Mining, Information Retrieval (CSCI 57200, 57300, 54701)
- Cryptography, Information Security (CSCI 52600, 55500)
- Databases (CSCI 54100, 54200)
- High Performance Computing (CSCI 52500)
- Numerical Computing (CSCI 51400, 51500)
- Programming Languages and Compilers (CSCI 50200, 56500)
- Scientific Visualization, Geometric Modeling, Graphics (CSCI 53000, 53100, 53500, 55000)
- Simulation and Modeling (CSCI 54300)
- Software Engineering (CSCI 50600, 50700, 51000)
- Systems and Networking (CSCI 50300, 50500, 53600)
- Theory (CSCI 58000, 58400)

Courses may be repeated. The last grade, even if lower, is used to compute all GPA's involving the course. Students must complete the course requirement by the end of their third semester. Exceptions

Students who have taken similar graduate courses outside the department may apply to the graduate committee for permission to take the Qualifying Course Examinations without taking the courses. In such cases, the GPA for the qualifying courses is computed on the basis of only the qualifying courses taken in the department. If there be none, the GPA requirement will not be applied.
Qualifying Examination, Part 1

The Qualifying Examination, Part 1 consists of a written or oral Qualifying Course Examination (QCE) in each of the four courses chosen to satisfy the qualifying course requirements. Students must pass all four examinations. There is no prohibition against taking more than four QCEs. The QCE need not be taken in the same semester as the course.

QCEs are given at the end of each course. Students who wish to take a QCE must make their intentions known to the graduate committee at IUPUI by the end of the 12th week of the semester by submitting a QCE request form. The examining committee for each QCE is appointed by the chairs of the graduate committees at West Lafayette and IUPUI. The instructor of the course is normally a member.

QCEs may be repeated only with the permission of the graduate committee at West Lafayette. Students must pass part 1 by the end of their third semester. The QCE result will be submitted to the assistant to the head at West Lafayette.

Qualifying Examination, Part 2

The student must pass an oral examination in one of the areas in the Areas and Courses Table. Prior to scheduling the examination, the student must indicate an area of research and select a thesis advisor from the CS faculty at IUPUI and a co-advisor from the CS faculty at West Lafayette.

The examining committee consists of three faculty members, none of whom is the student's advisor, appointed by the graduate committees at West Lafayette and IUPUI in consultation with the student's advisor. Two of the members must be from the West Lafayette campus, including the student's co-advisor, and one from the IUPUI campus. The student must arrange with the examining committee members the date, time, and place of the examination and secure the approval of the assistant to the head at West Lafayette (acting for the head) to schedule the examination. The oral examination is normally held at West Lafayette.

The oral examination may be repeated once. Additional repetitions must be approved by the graduate committee at West Lafayette, and will be granted only in special cases. The oral examination must be taken after the student has passed part 1 of the qualifying process and should be completed by the end of the fourth semester. The graduate committee reserves the right to appoint a committee and set an examination date for any student who has not completed the qualifying examination by that time.
Advisory Committee By the end of the semester in which the student completes the qualifying process, the student must form an advisory committee. To form the committee, the student first finds a faculty member who agrees to serve as chair of the committee; the chair and student then select two additional faculty members who are willing to serve on the committee, one must be the student's co-advisor at West Lafayette, and one must be a faculty at IUPUI.