

PhD in Computer Science

Minimum Admission Requirements

Applications are considered on an individual basis by the Graduate Admissions Committee. A complete set of transcripts of all undergraduate and graduate work is required before an applicant is considered. In addition to the application requirements of the Office of Admissions and the policies set by the Graduate College, applicants must meet the following program requirements:

- **Prior Degrees** Computer science or computer engineering. Outstanding candidates from other related fields will also be considered. Outstanding candidates holding a bachelor's degree in computer science can be considered for admission to the direct PhD program.
- **Grade Point Average** At least 3.50/4.00 for the final 60 semester hours (90 quarter hours) of undergraduate study.
- **Tests Required** GRE General scores are recommended for all applicants and **required** for financial aid applicants and all applicants with degrees from outside the U.S. A minimum of 300 GREV+GREQ score (with a minimum of 140+ GREV). All international students are required to submit Test of English as a Foreign Language (TOEFL), IELTS (International English Language Testing System), or PTE-Academic scores as well.
- **Minimum English Competency Test Score**
 - **TOEFL iBT** 80, with subscores of Reading 19, Listening 17, Speaking 20, and Writing 21, **OR**,
 - **IELTS Academic** 6.5, with 6.0 in each of the four subscores, **OR**,
 - **PTE-Academic** 54, with subscores of Reading 51, Listening 47, Speaking 53, and Writing 56.
- **Letters of Recommendation** Three required.
- **Personal Statement** Required.
- **Deadlines** The application deadline is the same as the Graduate College deadline; the deadline for applicants who want to be considered for funding can be found on the Graduate College website. Department financial aid decisions (Fellowship/TA/RA) are made starting in early February.
- Exceptional applicants who have completed a Bachelor of Science degree in Computer Science, or a related field, and wish to pursue a PhD will be considered for Direct PhD Admission. Such students will pursue the PhD degree without the requirement of first completing a master's degree. All students seeking this option must submit three letters of recommendation, a resume, and statement of purpose. Direct PhD Admission is competitive. For fullest consideration, any student seeking this admission should adhere to the early deadlines listed on the Graduate College website. See the section below for details on the course and research graduation requirements.

Degree Requirements

In addition to the Graduate College minimum requirements, students must meet the following program requirements:

- **Minimum Semester Hours Required** 108 from the baccalaureate.
- **Coursework**
 - *Students Admitted with Prior Master's Degree in CS or a Related Field:* Must complete a minimum of 24 hours of graduate credit

(6 courses) . Of the 24 hours, at least 16 hours must be CS coursework at the 500 level, excluding CS 590, CS 597, CS 598, and CS 599. Any course that is nearly equivalent to one taken in the bachelor's or master's program earlier will not earn PhD credit. Graduation credit for non-CS coursework must have prior department approval.

- **Students Admitted Directly after Bachelor's Degree in CS or a Related Field:** Must complete a minimum of 32 hours of graduate credit. Of the 32 hours, at least 16 hours must be CS coursework at the 500 level, excluding CS 590, CS 597, CS 598, and CS 599. At most 8 hours of preapproved non-CS graduate courses may be counted toward the overall requirement.
- **Other Requirements**
 - *Research Methods:* Required. Candidates must earn 4 hours in CS 590 within the first two years of enrollment.
 - *Colloquium:* Candidates are required to take ten colloquia within the first two years of enrollment. Dissertations are acceptable.
- **Examinations**
 - *Departmental Qualifying Examination:* Required; written and oral.
 - *Preliminary Examination:* Required; written and oral.
- **Dissertation** Required. Candidates must earn CS 599 credit of at least 48 hours beyond a master's degree and at least 72 hours beyond a bachelor's degree.
- **MS in Computer Science** Direct PhD students, as well as a student whose master's degree is in a discipline other than computer science and a student whose master's degree in computer science is from a non-US institutions, may apply to receive the MS in Computer Science after passing the preliminary examination. The request must be approved by the preliminary exam committee and director of graduate studies, and students must meet all requirements for the MS degree. The MS in Computer Science will be granted in the semester they meet the university graduation deadlines.

Support

PhD students are admitted with at least four years of guaranteed support in the form of a teaching or research assistantship during the academic year. Renewal of all financial support each semester is subject to satisfactory progress in our PhD program. The assistantships provide waiver of tuition and some fees and a stipend of at least \$2,510 per month (AY 2022-23 rate).