

Computer Science (PhD)

Graduate study in computer science is offered in the following areas: analysis of algorithms; artificial intelligence; automated reasoning; communication protocols; compilers; computational biology; computational complexity; computational visualization; computer architecture; computer graphics; computer networks; computer vision; cryptography; data mining; database management; distributed systems; fault-tolerant computing; formal methods; machine learning; mathematical software; mobile and ad hoc networks; natural language processing; neural networks; numerical analysis; operating systems; parallel programming; programming language design and implementation; randomized algorithms; real-time systems; robotics; scientific computing; secure computing; software construction from components; system modeling; theoretical computer science; and wireless networks. The PhD degree in Computer Science is STEM Designated Degree Programs, as identified by the Department of Homeland Security for purposes of the 24-month STEM optional practical training extension.

Graduate Handbook

Graduate handbook information is updated and maintained by each program. Graduate handbooks are available within each program's office and [online](#). Please contact the program with concerns or questions.

Admission

Most entering graduate students have degrees in computer science. Students with degrees in other areas may be considered for admission; if admitted, they may be required to take undergraduate courses in computer science, without credit toward a graduate degree, to satisfy background requirements.

Total Hours Required: 30

Requirements

The Doctor of Philosophy is a research degree for students who wish to pursue research careers in academia or industry. The main goal of the doctoral program is to prepare students to do outstanding research. Doctoral students take courses that provide the foundation on which to build their research programs, and are expected to become involved in research during their first semester and continue their involvement throughout their study at the University.

Students generally complete all course requirements within a three-year period and must maintain a grade point average of at least 3.00 in all computer science graduate courses. The Doctor of Philosophy degree requires a minimum of 30 semester hours of coursework, including dissertation hours. Typically, students complete their coursework, the Research Preparation Exam (RPE), the dissertation proposal defense, and the research and writing required for the dissertation within four to six years of full-time enrollment (84 to 126 semester credit hours).

Code	Title	Hours
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All students must also follow the requirements and policies below:

[Graduate Natural Sciences Requirements](#)

[Graduate University Requirements](#)