

COMPUTER SCIENCE (MS)

Graduate School

Program Website (<https://www.cs.cornell.edu/ms/>)

CIP: 11.0701 | HEGIS: 0701.00 | NYSED: 05567

Graduate Field

Computer Science (<https://catalog.cornell.edu/graduate-school/computer-science/>)

Program Description

Students wishing to earn a Ph.D. should apply directly to the Ph.D. program. However, it is possible to apply directly to the M.S. program. This is a very small, highly selective, four-semester program for students who wish to deepen their knowledge of computer science through advanced coursework, research, writing, and teaching. The program is ideal for self-motivated students who have expository skills, enjoy the research environment, and like working with undergraduates in introductory courses. Students in the program serve as teaching assistants and receive full tuition plus a stipend.

Please refer to the field of study directly for details.

Concentrations

- Artificial intelligence
- Computer science
- Programming languages and logics
- Scientific computing and applications
- Systems
- Theory of computation

Program Information

- Instruction Mode: In Person
- Location: Ithaca, NY
- Minimum Credits for Degree: 34

Program Requirements

- Minimum Semesters for Degree: 4

Graduate School Milestones

- Responsible Conduct of Research Training: Required
- Open Researcher and Contributor ID (ORCID): Required
- Student Progress Reviews (SPR) begin: Second Year
- Masters Exam (M Exam): Spring of fourth year
- Thesis: Spring of second year

Field Specific Milestones

- Four semesters of teaching assistantship required

Course Requirements

- Course requirements are determined by the student's Special Committee.

- Enrollment in a GRAD research course or the equivalent field specific research course is expected of all students.

University Graduation Requirements Requirements for All Students

In order to receive a Cornell degree, a student must satisfy academic and non-academic requirements.

Academic Requirements

A student's college determines degree requirements such as residency, number of credits, distribution of credits, and grade averages. It is the student's responsibility to be aware of the specific major, degree, distribution, college, and graduation requirements for completing their chosen program of study. See the individual requirements listed by each college or school or contact the college registrar's office (<https://registrar.cornell.edu/service-resources/college-registrar-directory/>) for more information.

Non-academic Requirements

Conduct Matters. Students must satisfy any outstanding sanctions, penalties or remedies imposed or agreed to under the Student Code of Conduct (Code) or Policy 6.4. Where a formal complaint under the Code or Policy 6.4 is pending, the University will withhold awarding a degree otherwise earned until the adjudication process set forth in those procedures is complete, including the satisfaction of any sanctions, penalties or remedies imposed.

Financial Obligations. Outstanding financial obligations will not impact the awarding of a degree otherwise earned or a student's ability to access their official transcript. However, the University may withhold issuing a diploma until any outstanding financial obligations owing to the University are satisfied.

Learning Outcomes

- Demonstrate knowledge at the undergraduate level of four core areas in the computer science: systems, AI, PL, and theory. Students should be able to solve problems in these four core areas at the undergraduate level.
- Demonstrate knowledge, understanding, applications, analysis, and evaluation of material at the graduate level in four out of five important core areas of computer science. The five different core areas are as follows: algorithms and theory of computation, artificial intelligence, systems, programming languages and methodology, scientific computing and applications.
- Demonstrate knowledge, understanding, applications, analysis, and evaluation of the three different value systems of the three computer science research styles that differ in how they evaluate and validate research results. The three different research styles are theory, systems, and applied.