

# COMPUTER SCIENCES, MS

The Department of Computer Sciences (CS) offers a dynamic environment for study, research, and professional growth. We are one of the oldest and most respected computer science departments in the United States – in fact, the first PhD in computer science graduated from the department in 1965.

Today, CS is recognized as having leading innovative research groups in computer architecture, database systems, distributed and grid computing, and nonlinear optimization, among others. We are also one of three departments, with the Department of Statistics and the Information School, in the new School of Computer, Data & Information Sciences (CDIS). With CDIS, we are creating more interdisciplinary research opportunities, expanding course offerings, and leading the computing revolution. We are firmly rooted in The Wisconsin Idea – that the university has a responsibility to use education for good, benefiting not just the UW-Madison community, but also the entire state of Wisconsin, the country, and the world.

Visit the department website (<https://www.cs.wisc.edu/>) for faculty interests, research activities, courses, and additional program information. Students may also be interested in other programs offered by the Department of Computer Sciences, including:

- Computer Sciences Master's Program (<http://guide.wisc.edu/graduate/computer-sciences/computer-sciences-ms/computer-sciences-computer-sciences-ms/>) (MS Computer Sciences: Computer Sciences): A research-oriented master's degree that prepares students for careers in industry research or for PhD level education in Computer Sciences.
- Professional Master's Program (<http://guide.wisc.edu/graduate/computer-sciences/computer-sciences-ms/computer-sciences-professional-program-ms/>) (MS Computer Sciences: Professional Program): This degree is designed for students who are primarily interested in a professional career as a computer scientist in a variety of industries.
- Data Engineering MS (<http://guide.wisc.edu/graduate/computer-sciences/data-engineering-ms/>): A master's program focused on principles and practices of managing large data sets.

## ADMISSIONS

### ADMISSIONS

Students apply to the Master of Science in Computer Sciences through one of the named options:

- Computer Sciences (<http://guide.wisc.edu/graduate/computer-sciences/computer-sciences-ms/computer-sciences-computer-sciences-ms/>)
- Professional Program (<https://guide.wisc.edu/graduate/computer-sciences/computer-sciences-ms/computer-sciences-professional-program-ms/>)

## FUNDING

### FUNDING

#### GRADUATE SCHOOL RESOURCES

Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid. Further funding information (<https://grad.wisc.edu/funding/>) is available from the Graduate School. Be sure to check with your program for individual policies and restrictions related to funding.

#### PROGRAM RESOURCES

Funding is offered to about half of the students to whom admission is offered. Funding is usually in the form of fellowships, teaching assistantships, or research assistantships. Because computer science skills are in demand, students who are admitted without funding are often able to find graduate assistantships on campus. The department website (<https://www.cs.wisc.edu/academics/graduate-programs/guidebook/financial-aid/>) provides information on funding options and offers suggestions for those who are admitted without department funding.

## REQUIREMENTS

### MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (<http://guide.wisc.edu/graduate/#policiesandrequirements>), in addition to the program requirements listed below.

### MAJOR REQUIREMENTS CURRICULAR REQUIREMENTS

#### Requirement Detail

Minimum Credit Requirement	30 credits
Minimum Residence Credit Requirement	16 credits
Minimum Graduate Coursework Requirement	15 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: <a href="https://policy.wisc.edu/library/UW-1244">https://policy.wisc.edu/library/UW-1244</a> ( <a href="https://policy.wisc.edu/library/UW-1244/">https://policy.wisc.edu/library/UW-1244/</a> ).
Overall Graduate GPA Requirement	3.00 GPA required. Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: <a href="https://policy.wisc.edu/library/UW-1203">https://policy.wisc.edu/library/UW-1203</a> ( <a href="https://policy.wisc.edu/library/UW-1203/">https://policy.wisc.edu/library/UW-1203/</a> ).
Other Grade Requirements	No other grade requirements.
Assessments and Examinations	None.
Language Requirements	No language requirements.

## REQUIRED COURSES

Select a Named Option (<https://guide.wisc.edu/graduate/computer-sciences/computer-sciences-ms/#NamedOptions>) for courses required.

## NAMED OPTIONS

A named option is a formally documented sub-major within an academic major program. Named options appear on the transcript with degree conferral. Students pursuing the Master of Science in Computer Sciences must select one of the following named options:

View as [listView](#) as [grid](#)

- **COMPUTER SCIENCES: COMPUTER SCIENCES, MS** ([HTTP://GUIDE.WISC.EDU/GRADUATE/COMPUTER-SCIENCES/COMPUTER-SCIENCES-MS/COMPUTER-SCIENCES-COMPUTER-SCIENCES-MS/](http://guide.wisc.edu/graduate/computer-sciences/computer-sciences-ms/computer-sciences-computer-sciences-computer-sciences-ms/))
- **COMPUTER SCIENCES: PROFESSIONAL PROGRAM, MS** ([HTTP://GUIDE.WISC.EDU/GRADUATE/COMPUTER-SCIENCES/COMPUTER-SCIENCES-MS/COMPUTER-SCIENCES-PROFESSIONAL-PROGRAM-MS/](http://guide.wisc.edu/graduate/computer-sciences/computer-sciences-ms/computer-sciences-professional-program-ms/))

## POLICIES

### POLICIES

Students should refer to one of the named options for policy information:

- Computer Sciences (<http://guide.wisc.edu/graduate/computer-sciences/computer-sciences-ms/computer-sciences-computer-sciences-ms/>)
- Professional Program (<https://guide.wisc.edu/graduate/computer-sciences/computer-sciences-ms/computer-sciences-professional-program-ms/>)

## PROFESSIONAL DEVELOPMENT

### PROFESSIONAL DEVELOPMENT GRADUATE SCHOOL RESOURCES

Take advantage of the Graduate School's professional development resources (<https://grad.wisc.edu/pd/>) to build skills, thrive academically, and launch your career.

### PROGRAM RESOURCES

The Department of Computer Sciences hosts many professional development opportunities, including job fairs, workshops, seminars, talks, employer information sessions, mentoring, and student socials. The Department of Computer Sciences' student organizations, Student-ACM (SACM) and Women's ACM (WACM), are active partners in providing professional development opportunities for computer sciences graduate students.

## LEARNING OUTCOMES

### LEARNING OUTCOMES

1. Articulates, critiques, or elaborates the theories, research methods, and approaches to inquiry or schools of practice in the field of study.
2. Identifies sources and assembles evidence pertaining to questions or challenges in the field of study.
3. Applies design and development principles in the construction of software systems of varying complexity.
4. Applies foundational principles in practical applications.
5. Independently acquires, synthesizes and applies required information pertaining to challenges in computer science.
6. Communicates clearly in ways appropriate to the field of study.

## PEOPLE

### PEOPLE

Visit the CS website to view our department faculty (<https://www.cs.wisc.edu/people/faculty/>) and staff (<https://www.cs.wisc.edu/people/staff/>).