

COMPUTER SCIENCES: COMPUTER SCIENCES, MS

This is a named option within the Computer Sciences MS. (<https://guide.wisc.edu/graduate/computer-sciences/computer-sciences-ms/>)

Research specialty areas include artificial intelligence, computational biology, computer architecture, computer graphics, computer networks, computer security, database systems, human-computer interaction, numerical analysis, optimization, performance analysis, programming languages and compilers, systems research, and theoretical computer sciences. See the department website (<https://www.cs.wisc.edu/>) for faculty interests, research activities, courses, facilities, and degree requirements.

ADMISSIONS

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Please consult the table below for key information about this degree program's admissions requirements. The program may have more detailed admissions requirements, which can be found below the table or on the program's website.

Graduate admissions is a two-step process between academic programs and the Graduate School. **Applicants must meet the minimum requirements (<https://grad.wisc.edu/apply/requirements/>) of the Graduate School as well as the program(s).** Once you have researched the graduate program(s) you are interested in, apply online (<https://grad.wisc.edu/apply/>).

Requirements	Detail
Fall Deadline	December 15
Spring Deadline	The program does not admit in the spring.
Summer Deadline	The program does not admit in the summer.
GRE (Graduate Record Examinations)	Not required but may be considered if available.
English Proficiency Test	Refer to the Graduate School: Minimum Requirements for Admission policy: https://policy.wisc.edu/library/UW-1241 (https://policy.wisc.edu/library/UW-1241/).
Other Test(s) (e.g., GMAT, MCAT)	n/a
Letters of Recommendation Required	3

Applicants with a strong background in computer sciences or a related field are encouraged to apply for admission. At a minimum, the applicant should have some programming experience, including courses in data structures and machine organization, and should have had a year of college-level mathematics at the calculus level or above. For more information on admissions, visit the department website (<https://www.cs.wisc.edu/graduate-admissions/>).

A submitted application (<https://grad.wisc.edu/apply/>) is required, consisting of:

- Resume/CV
- Statement of purpose
- Must complete the supplemental application sections
- Most up-to-date unofficial transcript(s) from all previous higher education institutions, regardless of whether or not a degree was earned (official transcripts are requested of only recommended applicants); international academic records must be in the original language accompanied by an official English translation
- Test scores and three letters of recommendation as detailed above

Contact admissions@cs.wisc.edu with questions about admissions in the traditional MS or the PhD programs.

Please see the Professional Program (<https://guide.wisc.edu/graduate/computer-sciences/computer-sciences-ms/computer-sciences-professional-program-ms/>) admission page for professional program admissions information.

FUNDING

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GRADUATE SCHOOL RESOURCES

[The Bursar's Office provides information about tuition and fees associated with being a graduate student.](#) [Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid.](#) [Further funding information 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 degree requirements (<https://guide.wisc.edu/graduate/#requirements>) and policies (<https://guide.wisc.edu/graduate/#policies>), in addition to the program requirements listed below.

NAMED OPTION REQUIREMENTS MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW–Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

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: <https://policy.wisc.edu/library/UW-1244> (<https://policy.wisc.edu/library/UW-1244/>).

Overall
Graduate
GPA
Requirement 3.00 GPA required.
Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: <https://policy.wisc.edu/library/UW-1203> (<https://policy.wisc.edu/library/UW-1203/>).

Other Grade
Requirements No other grade requirements.

Assessments
and
Examinations None.

Language
Requirements No language requirements.

REQUIRED COURSES

24 credits must be Computer Sciences (COMP SCI (https://guide.wisc.edu/courses/comp_sci/)) courses numbered 400 or above. The following courses are not allowed to count toward these 24 credits:

- COMP SCI 400 Programming III
- seminar course (COMP SCI/B M E/B M I/BIOCHEM/CBE/GENETICS 915)
- individual instruction courses (COMP SCI 699, COMP SCI 799 and COMP SCI 899), and
- COMP SCI 702.

In addition, at least 15 of the 24 credits must be **Core Credits**, which are Computer Sciences (COMP SCI ([\[comp_sci/\]\(https://guide.wisc.edu/courses/comp_sci/\)\)\) courses numbered 700–889 graded on A–F scale with the following exclusions/qualifications:](https://guide.wisc.edu/courses/</p>
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- COMP SCI 790 Master's Thesis normally counts towards core credit. In rare instances, the thesis supervisor or committee may (at the time of evaluation of the thesis work) designate credit awarded for COMP SCI 790 as ineligible for core credit; credit awarded under this scenario may still count towards the 24 qualifying Computer Sciences credits. Credit for COMP SCI 790 is provided as follows: (a) A student can obtain at most 3 credits, all for a project for which a report has been filed with the department and approved by at least one full-time Computer Science faculty member, or (b) the student can obtain at most 6 credits, for a master's thesis that has been submitted as a departmental tech report and approved by a properly formed thesis committee.
- Among the topics courses COMP SCI 758, COMP SCI 839 and COMP SCI 880, a maximum of one such course can be used as core credit.
- COMP SCI 838 is not allowed to count towards Core Credits.

The remaining 6 credits can be from any subject. COMP SCI/B M E/B M I/BIOCHEM/CBE/GENETICS 915 can be taken multiple times for credit.

POLICIES

GRADUATE SCHOOL POLICIES

The Graduate School's Academic Policies and Procedures (<https://grad.wisc.edu/acadpolicy/>) serve as the official document of record for Graduate School academic and administrative policies and procedures and are updated continuously. Note some policies redirect to entries in the official UW–Madison Policy Library (<https://policy.wisc.edu/>). Programs may set more stringent policies than the Graduate School. Policies set by the academic degree program can be found below.

NAMED OPTION-SPECIFIC POLICIES

PRIOR COURSEWORK

Graduate Credits Earned at Other Institutions

No credits taken at other institutions are allowed to satisfy requirements.

Undergraduate Credits Earned at Other Institutions or UW–Madison

No credits from an other institution or UW–Madison undergraduate degree are allowed to satisfy requirements.

Credits Earned as a Professional Student at UW–Madison (Law, Medicine, Pharmacy, and Veterinary careers)

No credits from a UW–Madison Professional degree (Law, Medicine, Pharmacy, or Veterinary career) are allowed to satisfy requirements.

Credits Earned as a University Special Student at UW–Madison

With program approval, students are allowed to transfer no more than 15 credits of coursework numbered 300 or above taken as a UW–Madison University Special student. Of the 15 credits of allowable prior coursework, a maximum of 6 credits are allowed for courses numbered 300–399 and COMP SCI 400. However, these credits are not allowed to count toward the 50% graduate coursework minimum unless numbered 700 or above or are taken to meet the requirements of a capstone certificate and has the

"Grad 50%" attribute. Courses must have been taken post-baccalaureate. Coursework earned ten or more years prior to admission to a master's degree is not allowed to satisfy requirements.

PROBATION

At the end of any regular (nonsummer) semester, a student is considered to be making satisfactory academic progress (SAP) if the following conditions are all satisfied:

- The student has completed at least 6 (if full load) or 3 (if part load) credits of approved courses during the semester.
- The student has removed all Incomplete grades from any previous regular semester or summer session.
- The student has passed any required exams and procedures within designated time limits.

Any graduate student who fails to make satisfactory academic progress (SAP) during two consecutive regular semesters (fall and spring, or spring and fall) will be dismissed from the department at the end of the subsequent summer session. Any graduate student who fails to make satisfactory academic progress (SAP) due to missed deadlines will be dismissed from the department at the end of the subsequent summer session.

ADVISOR / COMMITTEE

Students are advised by the Computer Sciences Graduate Advising Committee.

CREDITS PER TERM ALLOWED

15 credit maximum. Refer to the Graduate School: Maximum Credit Loads and Overload Requests (<https://policy.wisc.edu/library/UW-1228/>) policy.

TIME LIMITS

Refer to the Graduate School: Time Limits (<https://policy.wisc.edu/library/UW-1221/>) policy.

GRIEVANCES AND APPEALS

These resources may be helpful in addressing your concerns:

- Bias or Hate Reporting (<https://doso.students.wisc.edu/bias-or-hate-reporting/>)
- Graduate Assistantship Policies and Procedures (<https://hr.wisc.edu/policies/gapp/#grievance-procedure>)
- Hostile and Intimidating Behavior Policies and Procedures (<https://hr.wisc.edu/hib/>)
 - Office of the Provost for Faculty and Staff Affairs (<https://facstaff.provost.wisc.edu/>)
- Employee Assistance (<http://www.eao.wisc.edu/>) (for personal counseling and workplace consultation around communication and conflict involving graduate assistants and other employees, post-doctoral students, faculty and staff)
- Employee Disability Resource Office (<https://employeedisabilities.wisc.edu/>) (for qualified employees or applicants with disabilities to have equal employment opportunities)
- Graduate School (<https://grad.wisc.edu/>) (for informal advice at any level of review and for official appeals of program/departmental or school/college grievance decisions)
- Office of Compliance (<https://compliance.wisc.edu/>) (for class harassment and discrimination, including sexual harassment and sexual violence)

- Office Student Assistance and Support (OSAS) (<https://osas.wisc.edu/>) (for all students to seek grievance assistance and support)
- Office of Student Conduct and Community Standards (<https://conduct.students.wisc.edu/>) (for conflicts involving students)
- Ombuds Office for Faculty and Staff (<http://www.ombuds.wisc.edu/>) (for employed graduate students and post-docs, as well as faculty and staff)
- Title IX (<https://compliance.wisc.edu/titleix/>) (for concerns about discrimination)

L&S POLICY FOR GRADUATE STUDENT ACADEMIC APPEALS

Graduate students have the right to appeal an academic decision related to an L&S graduate program if the student believes that the decision is inconsistent with published policy.

Academic decisions that may be appealed include:

- Dismissal from the graduate program
- Failure to pass a qualifying or preliminary examination
- Failure to achieve satisfactory academic progress
- Academic disciplinary action related to failure to meet professional conduct standards

Issues such as the following cannot be appealed using this process:

- A faculty member declining to serve as a graduate student's advisor.
- Decisions regarding the student's disciplinary knowledge, evaluation of the quality of work, or similar judgements. These are the domain of the department faculty.
- Course grades. These can be appealed instead using the L&S Policy for Grade Appeal (<https://kb.wisc.edu/lis/22258/>).
- Incidents of bias or hate, hostile and intimidating behavior (<https://hr.wisc.edu/hib/>), or discrimination (Title IX (<https://compliance.wisc.edu/titleix/>), Office of Compliance (<https://compliance.wisc.edu/eo-complaint/formal-investigations/>)). Direct these to the linked campus offices appropriate for the incident(s).

Appeal Process for Graduate Students

A graduate student wishing to appeal an academic decision must follow the process in the order listed below. Note time limits within each step.

1. The student should first seek informal resolution, if possible, by discussing the concern with their academic advisor, the department's Director of Graduate Studies, and/or the department chair.
2. If the program has an appeal policy listed in their graduate program handbook, the student should follow the policy as written, including adhering to any indicated deadlines. In the absence of a specific departmental process, the chair or designee will be the reviewer and decision maker, and the student should submit a written appeal to the chair within 15 business days of the academic decision. The chair or designee will notify the student in writing of their decision.
3. If the departmental process upholds the original decision, the graduate student may next initiate an appeal to L&S. To do so, the student must submit a written appeal to the L&S Assistant Dean for Graduate Student Academic Affairs within 15 business days of notification of the department's decision.
 - a. To the fullest extent possible, the written appeal should include, in a single document: a clear and concise statement of the academic decision being appealed, any relevant background on what led to

the decision, the specific policies involved, the relief sought, any relevant documentation related to the departmental appeal, and the names and titles of any individuals contributing to or involved in the decision.

- b. The Assistant Dean will work with the Academic Associate Dean of the appropriate division to consider the appeal. They may seek additional information and/or meetings related to the case.
 - c. The Assistant Dean and Academic Associate Dean will provide a written decision within 20 business days.
4. If L&S upholds the original decision, the graduate student may appeal to the Graduate School. More information can be found on their website: Grievances and Appeals (<https://grad.wisc.edu/documents/grievances-and-appeals/>) (see: Graduate School Appeal Process).

OTHER

n/a

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.