Undergraduate Student FAQs

ACADEMICS

What are the CS major requirements?
- The CS major requires foundational coursework in programming, computer architecture, calculus, and additional math. Beyond that, students must complete one Theory course, two Software/Hardware courses, one Applications course, and two CS Elective courses.
- For more details, search “Computer Sciences” at https://guide.wisc.edu/

When can I declare the CS major?
- Contrary to what many believe, students are not admitted directly into the CS major. Students will spend time as a non-declared student while they work towards the major declaration requirements outlined below. Students can declare the CS major as soon as they have satisfied those major declaration requirements, which will take most students two semesters.

How do I declare the CS major?
- The requirements to declare the CS major are as follows:
  ➔ Completion of COMP SCI 300 and (MATH 222 or 276)
  ➔ Grade of BC or higher in an introductory programming course (COMP SCI 300, 354, or 400) taken at UW-Madison
  ➔ 2.250 GPA or higher in the first attempt of the following courses: COMP SCI 300 and (MATH 222 or 276)
- Once these requirements are met, students must fill out an online major declaration form.

What if I have no programming experience?
- CS 200 – Programming I is the first course in the intro programming sequence and does not expect that students have any programming experiences.
- The WES-CS Study Group (CS 304) is a 1-credit class that students can take concurrently with CS 200 for additional support and peer-to-peer learning.

Can I graduate in four years?
- The CS advisors generally recommend that students take two CS/math courses per semester. With proper planning, it is feasible to graduate with a Comp Sci major within 4 years. It is highly suggested and encouraged you meet with a Comp Sci advisor to make a personalized plan.
- For more details, see: cs.wisc.edu/undergraduate/sample-four-year-planning-guides/
What kind of coursework does the department offer?

• The department offers project-oriented coursework in artificial intelligence, computational biology, computer architecture, computer graphics, computer networks, computer security, computer systems, databases, human-computer interaction, operating systems, programming languages and compilers, software engineering, and wireless systems.
• The department also offers additional coursework in algorithms and complexity, systems performance and analysis, numerical analysis, and optimization.

What programming languages are classes taught in?

• The intro programming sequence (CS 200, 300, and 400) is taught in Java.
• Other courses are taught in a variety of languages, such as Python, C, C++, MATLAB, and SQL.

Is the major tracked/do I have to pick a specialization?

• The CS major at UW-Madison is not tracked and does not require students to select a specialization. The major requirements are designed to allow students to take advanced-level courses that best align with their interests.

What is the difference between Computer Sciences and Computer Engineering?

• Computer Sciences is the study and application of computation and programming theory. CS places a greater focus on software. Computer Scientists, for example, build the OS and apps that make the iPhone run.
• Computer Engineering (CMPE) is the study and application of computers, computing, and computer-based systems. CMPE places a greater focus on hardware. Computer Engineers, for example, build the physical iPhone.
• There is a lot of overlap between these two fields. Many students double major in CS and CMPE.

ADVISING

How can I contact a CS advisor?

• Students can contact the CS advisors via email at advising@cs.wisc.edu.
• During most times during the semester, students may schedule appointments with Comp Sci advisors using STARFISH or by attending drop-in hours posted on https://www.cs.wisc.edu/undergraduate/undergraduate-advisors/
FACULTY, RESEARCH, AND INVOLVEMENT

Who are the faculty?
• Our faculty includes two national Medal of Science recipients and four winners of the Association for Computing Machinery’s Doctoral Dissertation Award.
• Our faculty is recognized globally for research in computer architecture, database systems, distributed and grid programming, nonlinear optimization, and more.

Are there research opportunities for undergraduates?
• Yes! Students can work with faculty as part of a senior thesis, a senior honors thesis, through directed study, or without earning credit.
• Students can work with faculty in the CS department or with a number of affiliate faculty across campus. Affiliate faculty are housed in different departments (such as Engineering, Genetics, or Psychology), but do research that is very closely related to CS.
• It is up to students to take the initiative to set up a research opportunity. The first step is always to reach out to faculty, so it is important to develop rapport with professors.
• For information on which faculty are doing research in which areas, see: cs.wisc.edu/research/research-groups/

Can I study abroad if I do this major?
• Yes! Many of our students choose to study abroad and we are constantly evaluating courses to see if they can transfer back as courses that will satisfy CS major requirements.
• For more details, search “Computer Sciences” at studyabroad.wisc.edu/

What are some other involvement opportunities related to CS?
• There are lots of CS-related involvement opportunities available to UW-Madison students, including: WACM, Kappa Eta Kappa, The Hub, the Undergraduate Projects Lab (UPL), programming contests, and hackathons.
• For more details, see: cs.wisc.edu/the-student-experience/student-orgs-and-competitions/
Are internships required?

- No, but they are recommended. Many CS majors will complete at least one internship and internships are a great way to get a feel for what it is like to work in the field.

Do you help students find internships?

- The Department of Computer Sciences hosts an annual job fair where companies recruit students for jobs and internships.
- Students can also utilize Handshake, a cross-campus job and internship database, to find opportunities.

What is the job placement rate for UW CS graduates?

- Approximately 80% of UW CS graduates receive full-time job offers by graduation.

Where are UW CS graduates working?

- Graduates of the UW CS department work for companies all over the world, but some notable companies that recent graduates have headed to include: Amazon, Epic, Facebook, Google, IBM, Intel, Liberty Mutual, X-ES, and Microsoft.

How many UW CS graduates go on to graduate school? Where are they attending?

- Approximately 12% of UW CS graduates plan on heading straight to graduate school after graduation. Students have been admitted to programs at UW-Madison, Berkeley, Carnegie Mellon, Cornell, Georgia Tech, Illinois, Minnesota, MIT, Princeton, Stanford, Texas, Tufts, Washington, and more.