INTRODUCTION TO THE MAJOR

The Computer Science major (CS) deals with computer theory, methods of information processing, hardware and software design, and applications. The major combines a rigorous technical program with background in the liberal arts and sciences. The CS major prepares students for technical careers or graduate school programs related to EECS or CS.

All students admitted to the College of Letters & Science are admitted as undeclared students. To declare CS, students must achieve a cumulative grade point average of 3.30 in CS61A, CS61B, & CS70. All students who meet this criteria are admitted into the major.

ONE DEPARTMENT, TWO PROGRAMS

There is no difference in the CS course content between the CS and EECS majors—the differences are what other subjects you would like to study and the admissions processes to the university and majors.

If you prefer greater flexibility in your coursework or have an interest double-majoring in an area outside engineering, the CS major might be a good choice. There is greater opportunity to explore other departments, like Economics, Business, and Music.

If you have a great interest in electrical engineering or in double-majoring in another engineering major, the EECS major may be better suited for you.

RELATED MAJORS

- There are many ways to get exposure to CS other than via the CS major. The following majors are avenues to study CS and to help prepare students for industry and graduate school: Applied Math, Cognitive Science, Data Science, and Statistics.
- The CS minor is also a great option that equips students for industry and graduate school.

“CS isn’t something I could’ve done alone, so I’m grateful for the community here.”

– Steven Tan, CS student and CS Peer Advisor
**Bachelor of Arts**

### COMPUTER SCIENCE

**Design Your Journey**

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<th>FIRST YEAR</th>
<th>SECOND YEAR</th>
<th>THIRD YEAR</th>
<th>FOURTH YEAR</th>
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**Explore your major**

- See CS requirements and declaration policies
  - Plan on 1 CS class & 1 math class/semester: Take CS10 and/or CS8 before CS61A, if no coding experience. See math requirements and AP/IB policies and find calculusscaling point. Check in with a CS major advisor.

- Complete the CS prerequisite coursework to declare your major. It is recommended to apply to CS by the end of your 2nd year. Use the EECS website to help guide your B.A. program, and the HKN course guide to think about future classes in CS/EE. Consider a minor.

- Complete CS lower-division requirements, begin taking upper-division courses. Check-in with a CS major advisor. Participate in faculty advising each semester once declared. If eligible and interested in research, consider the EECS Honors Program.

- Complete remaining CS upper-division requirements. Consider getting faculty permission to take CS graduate courses. Meet with a CS advisor to ensure CS requirements will be completed. Check-in with an L&S advisor to stay on track.

**Connect and build community**

- New to CS? Apply to CS Scholars. Get support in classes from resources and counselors.
  - Become familiar with Disabled Students' Program, Gender Equity Resource Center, Undocumented Student Program, Educational Opportunity Program.

- Learn about EECS student organizations. Consider becoming an Academic Intern, Reader, or Tutor for a lower-division CS/EE class.
  - Seek CS Peer Advising and ask questions on the EECS 101 on Edstem.
  - Go to office hours of professors and GSIs.

- Enjoy teaching and/or mentoring? Become an EE/CS DeCal facilitator or CS Monitor.
  - Learn how to become an Undergraduate Student Instructor in future semesters.
  - Consider applying to the Accel Scholars Program.

- Give back by becoming a CS peer advisor or tutor at the Student Learning Center. Volunteer for EECS Departmental events like CS Education Day and Cal Day.
  - See ways to stay in touch with the EECS Department after you graduate.

**Discover your passions**

  - Visit the Office of Undergraduate Research and Scholarships to learn about research opportunities.
  - Take a DeCal, a student-facilitated course.

- Assist a professor in their research through the Undergraduate Research Apprenticeship Program.
  - Attend the EECS Department Colloquium Series to learn more about the field.
  - Learn more about research opportunities available at UC Berkeley.

- Explore Beehive and other EECS research opportunities for undergraduates.
  - Learn about upper-division technical electives for your major outside CS.
  - Join CalTeach to gain teaching skills and explore a career in education.

- Carry out your own research project funded by scholarships.
  - Attend events at the Sutardja Center for Technology and Innovation.

**Engage locally and globally**

- Explore study abroad options now so you can incorporate them into your sophomore or junior year plans.
  - Explore volunteer opportunities on campus.

- Explore study abroad options for CS and meet with both a CS major advisor and your L&S advisor to confirm requirement fulfillment.
  - Join Bridging Berkeley to become a math mentor to middle schoolers.

- Interested in community outreach? Check out the opportunities available in community outreach programs for engineering students.
  - Get matched with a graduate student mentor through Berkeley Connect.

- Consider researching and applying for scholarships available to recent Berkeley graduates.
  - If interested in graduate school, explore gap year opportunities prior to embarking on your next academic or career adventure.

**Reflect and plan your future**

- Use the Yearly Planner to guide your career path.
  - Join Handshake for Berkeley-specific career opportunities.

- Learn about career opportunities in EECS at the Career Center.
  - Look for internship programs at various companies specific to first-year students.

- Subscribe to the eecs-ugrad-jobs list-serve to learn about EECS Info-sessions and Tech Talks.
  - Attend the EECS Internship Fair, EECS & STEM Career Fairs.
  - Meet with the Career Center or UPE for resume help and interview practice.

- Attend Engineering and Tech Career Conference to prepare for recruiting season.
  - Utilize job search tools from the Career Center.
  - Explore graduate school options by speaking with faculty members and advisors.

- Continue to attend industry-related events. Take the GRE & seek letters of recommendation if interested in graduate school.
  - View the First Destination Survey to find out what recent grads are doing.

**WHAT CAN I DO**

**Jobs and Employers**

- Application Developer, Workday
  - ASIC Engineer, Nvidia
  - Assoc. Publishing Producer, Google
  - Consultant, Bain and Company
  - Cyber Security Consultant, Deloitte
  - Data Analyst, Apple
  - Data Scientist, Nerdwallet
  - Front End Developer, HealthTap
  - Hardware Engineer, Apple
  - Infrastructure Engineer, Capital One
  - iOS Engineer, Mozilla
  - Machine Learning Engineer, eBay
  - Mobile Developer, Sony
  - Program Manager, Microsoft
  - R&D Engineer, Glint Photonics
  - Software Developer, Expedia
  - Software Engineer, AirBnB
  - Surface Warfare Officer, U.S. Navy
  - Teacher, Teach for India
  - Technology Analyst, Goldman Sachs
  - UX Designer, GoDaddy

**Graduate Programs**

- Algebra and Numbers Theory
  - Artificial Intelligence and Robotics
  - Audiology and Hearing Sciences
  - Biological Sciences
  - Biostatistics
  - Chemistry
  - Computational Mathematics
  - Computer Engineering
  - Computer Graphics
  - Computer Science
  - Electrical Engineering
  - Industrial and Org. Psychology
  - Medicine
  - Physical Chemistry
  - Physics

- Examples gathered from the First Destination Survey of recent Berkeley graduates.

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