Yale Computer Science

Community & Collaboration

Our department prides itself on being a collaborative space for students to explore their interests and work with others on exciting projects. Whether collaborating on a startup idea, working together on a course problem set, or helping each other prep for interviews, our students constantly engage with one another to build community within the department. This community is further supported by the many computer science extracurricular groups on campus.

Balanced Learning

The department offers a wide range of courses in systems, theory, and application. Not only do students learn how to build and create real-world systems, they learn the theory behind these systems and how to use them. Course offerings span topics including machine learning, full-stack web development, distributed systems, networks, theory of system design, algorithms, and more courses are added every year!

Departmental Support

Yale Computer Science works to ensure all students receive the support they need to succeed in the major and beyond. Faculty members are readily available for conversations with undergrads about courses, professional and research opportunities, and more. In addition, each course in the department hires undergraduate students who have taken the course in the past to hold office hours and guide current students through the course.

Exciting Opportunities

Our students have access to a wide range of opportunities to grow their skills and explore future careers. They are consistently recruited by the top tech companies with many interning even after their first year. Students also have the opportunity to join labs across campus to do research starting as early as their first semester. Meanwhile, entrepreneurial students will often collaborate to develop startup ideas or join on as technical co-founders.

Introductory Course Offerings

CPSC 100: Introduction to Computing and Programming

This course, also known as CS50 and taught jointly with Harvard, teaches students of all majors how to program and solve problems in a variety of languages (C, Python, SQL, and Javacript/CSS/HTML).

CPSC 110: Python Programming for Humanities and Social Sciences

This course is designed specifically for social science and humanities majors. Students learn to apply computing techniques and data analysis tools to social science and humanities case studies.

CPSC 112: Introduction to Programming

This course focuses on building programs using Java, going deeper into user-defined data types and object-oriented programming. Applications include animation, simulation, data visualization, and audio.

CPSC 200: Introduction Information Systems

This survey course is designed for nonmajors. Students learn Python and focus on the practical applications of computing while also looking at computer hardware, software, and related topics.

CPSC 201: Introduction to Computer Science

For students with a stronger computer science background, this course covers the basic concepts, techniques, and applications of computer science including systems and theory.