

Human Computer Interaction, Minor

Minor in Interdisciplinary HCI

The Minor in Interdisciplinary Human-Computer Interaction will give students core knowledge about techniques for building successful user interfaces, approaches for conceiving, refining, and evaluating interfaces that are useful and useable, and techniques for identifying opportunities for computational technology to improve the quality of people's lives. The students will be able to effectively collaborate in the design, implementation, and evaluation of easy-to-use, desirable, and thoughtful interactive systems. They will be prepared to contribute to multidisciplinary teams that create new interactive products, services, environments, and systems.

The HCI minor is targeted at undergraduates who expect to get jobs where they design and/or implement information technology-based systems for end users, as well as students with an interest in learning more about the design of socio-technical systems. It is appropriate for students with a major in Information Systems, as well as students in less software-focused majors, including Design, Architecture, Art, Business Administration, Psychology, Statistics, Decision Science, Mechanical Engineering, Electrical Engineering, English and many others in the university.

Curriculum

The following requirements are for students entering Fall 2026.

Prerequisite (select one)

		Units
15-110	Principles of Computing	10
15-112	Fundamentals of Programming and Computer Science	12
15-121	Introduction to Data Structures	10
15-104	Introduction to Computing for Creative Practice	10
02-120	Programming for Scientists	12

CORE COURSES

		Units
05-391	Designing Human Centered Software	12
05-360	Interaction Design Fundamentals	12

HCI Minors who have a primary major in Design must substitute taking 05-360 Interaction Design Fundamentals with another HCI 05-xxx course.

Electives

HCI minor students must take four HCI-related electives (9 units or more). Electives are intended to provide minor students with advanced concepts and skills relevant to HCI or breadth of experience not available from their primary major. **Two out of the four HCI electives must be courses in HCI offered by the Human-Computer Interaction Institute, meaning they have an 05 prefix number.**

Students can take electives in the HCII or courses relevant to HCI from many other departments on campus. All external electives are approved on a case-by-case basis.

All 05-xxx courses are pre-approved as HCI electives; however, core courses cannot double-count as electives. See the HCII website (<https://www.hcii.cmu.edu/academics/hci-undergrad/electives>) for a list of current pre-approved electives.

Double Counting

Students may double count up to two (2) of the required core and elective courses (prerequisite courses do not apply to the double-counting rule) with their primary major.

Admission to the Minor

Because space is limited in the minor's required courses, enrollment in the HCI minor is currently limited. The admissions period occurs in spring semesters. For more details, see the HCI minor website at <https://www.hcii.cmu.edu/academics/hci-undergrad/minor-hci>.