

The Minor in Human-Computer Interaction

The human-computer interaction (HCI) minor is designed to give any undergraduate student at Washington University a multidisciplinary understanding of the principles and applications of HCI. This minor will introduce students to the techniques necessary to create effective user interfaces: requirements gathering, ideation, prototyping, visual design and evaluation. Students will explore these ideas in a variety of application contexts.

The HCI minor is intended for students who are interested in the design of user-centered interactive technologies and those desiring jobs that include user interface creation, product design, UX/UI design, app development, virtual and augmented realities, and so on. This minor should appeal to students in the College of Art — particularly designers and computationally intrigued artists — who are interested in gaining a more in-depth knowledge of back-end development skills. It will also be of interest to engineering students looking for more experience with aesthetics and front-end design skills. In addition to being useful for these primary audiences, this minor allows students from other departments on campus to support their studies with a clear track in a hybrid pursuit of design and programming.

Course Work

Students must complete two pillar courses, one integration course and three approved electives. Courses listed below are considered approved elective offerings between the Sam Fox School and the McKelvey School of Engineering.

- **Pillar Courses (6 units):**

Code	Title	Units
ART 138S	Visual Principles for the Screen	3
CSE 131	Introduction to Computer Science	3

- **Integration Courses (3 units):**

Code	Title	Units
ART 236A	Interaction Design: Understanding Health and Well-Being	3
CSE 256A	Introduction to Human-Centered Design	3

- **Electives (9 units, with at least one course each from CSE and Art/Design):**

Code	Title	Units
ART 332J	UX Research Methods for Design	3
ART 336B	Advanced Interaction Design	3
ART 336P	Conditional Design	3
ART 338I	Communication Design: Interaction Foundations	3
ART 432A	Interaction Design: User-Centered Applications	3
ART 440T	Advance Visual Principles for the Screen	3
CSE 204A	Web Development	3
CSE 330S	Rapid Prototype Development and Creative Programming	3
CSE 438S	Mobile Application Development	3
CSE 450A	Video Game Programming	3
CSE 457A	Introduction to Visualization	3
CSE 556A	Human-Computer Interaction Methods	3
CSE 557A	Advanced Visualization	3
PNP 200	Introduction to Cognitive Science	3
Psych 360	Cognitive Psychology	3

Additional approved elective courses can be found by viewing the Google Docs file (https://docs.google.com/spreadsheets/d/1XZvIRmYTBVsXWBqo-WfyYtkyov5dvsNz3vDH_4tIYag/edit/#gid=0) maintained for this program.