

Human-Computer Interaction, MS (Boston)

Admissions to this program will open for the 2027-2028 academic year.

Khoury College of Computer Sciences; the College of Arts, Media and Design; the College of Engineering; and Bouvé College of Health Sciences jointly offer an interdisciplinary Master of Science in Human Computer Interaction. This program aims to prepare students to design, evaluate, and build interactive systems that center human needs, behaviors, and experiences. Students engage in rigorous coursework that develops depth in user-centered design, interaction design, human factors, usability evaluation, prototyping, and the social and ethical implications of computing.

Students are also able to choose elective courses from offerings across the four participating colleges and the broader university. This flexibility allows students to explore specialized applications of HCI such as accessible technologies, emerging interfaces, data-driven interaction, human-machine systems, human movement science, or design for social impact.

Graduates of the program are well positioned for careers in user experience design and research, interaction design, product design, human-centered computing, human factors engineering, or for continued study in doctoral programs related to HCI and design research.

During the admissions process, prospective applicants work with recruitment and enrollment coaching teams to determine the most appropriate program fit prior to applying.

In this degree program, students are admitted to the college associated with their selected concentration, and the degree is awarded by that college. The concentrations are associated with the colleges as follows:

- Computing—Khoury College of Computer Sciences
- Design—College of Arts, Media and Design
- Human Machine Systems—College of Engineering
- Human Movement Science—Bouvé College of Health Sciences

Students will follow all academic policies associated with their home college.

Program Requirements

Beginning with students admitted in the fall of 2026, all students pursuing on-ground master's degree programs must complete a university-level experiential learning requirement. This requirement may be fulfilled through the curriculum, co-op, or other work- or industry-integrated learning experiences.

Human-Computer Interaction Core

A cumulative GPA of 3.000 or higher is required in the following:

Code	Title	Hours
ARTG 5120	Research Methods for Design	4
CS 5340	Computer/Human Interaction	4
CS 5347 or INAM 5347	Understanding Users	4
CS 6390 or INAM 6390	Human-Centered Computing Capstone	4

Human-Computer Interaction Concentration Options

Complete one of the following:

- Computing (p. 2)—Khoury College of Computer Sciences
- Design (p. 2)—College of Arts, Media and Design
- Human Machine Systems (p. 2)—College of Engineering
- Human Movement Science (p. 2)—Bouvé College of Health Sciences

Program Credit/GPA Requirements

32 total semester hours required

Additional hours required for participation in optional co-op in some concentrations

Minimum 3.000 GPA required

COMPUTING CONCENTRATION—KHOURY COLLEGE OF COMPUTER SCIENCES

Code	Title	Hours
CS 5170	Artificial Intelligence for Human-Computer Interaction	4
or CS 5345	Interactive Prototyping	
Electives		
Complete 12 semester hours of courses from any college's courses on the electives course list below.		12
Optional Co-op		
Students must complete a required co-op preparation course before participating in co-op. Consult your academic advisor for details.		
CS 6964	Co-op Work Experience	0
or CS 6954	Co-op Work Experience - Half-Time	
or CS 6955	Co-op Work Experience Abroad - Half-Time	
or CS 6965	Co-op Work Experience Abroad	

DESIGN CONCENTRATION—COLLEGE OF ARTS, MEDIA AND DESIGN

Code	Title	Hours
ARTG 5910	Human-Centered Design	4
Electives		
Complete 12 semester hours of courses from any college's courses on the electives course list below.		12
Optional Co-op		
Complete the following:		
EEAM 6964	Co-op Work Experience	0
or EEAM 6954	Co-op Work Experience - Half-Time	
or EEAM 6955	Co-op Work Experience Abroad - Half-Time	
or EEAM 6965	Co-op Work Experience Abroad	

HUMAN MACHINE SYSTEMS CONCENTRATION—COLLEGE OF ENGINEERING

Code	Title	Hours
IE 6500	Human Performance	4
IE 7315	Human Factors Engineering	4
Electives		
Complete 8 semester hours of courses from any college's courses on the electives course list below.		
Optional Co-op		
Students must complete ENCP 6100 to qualify for co-op experience:		
ENCP 6100	Introduction to Cooperative Education	1
ENCP 6964	Co-op Work Experience	0
or ENCP 6954	Co-op Work Experience - Half-Time	
or ENCP 6955	Co-op Work Experience Abroad - Half-Time	
or ENCP 6965	Co-op Work Experience Abroad	

HUMAN MOVEMENT SCIENCE CONCENTRATION—BOUVÉ COLLEGE OF HEALTH SCIENCES

Code	Title	Hours
PT 5170	Motor Control	4
and PT 5171	and Lab for PT 5170	
PT 7020	Technologies in Movement and Rehabilitation Science	4
Electives		
Complete 8 semester hours of courses from any college's courses on the electives course list below.		8
Optional Co-op		
Students must complete HLTH 5101 to qualify for co-op experience:		
HLTH 5101	Professional Development for Bouvé Graduate Co-op	1
HLTH 6964	Co-op Work Experience	0

Electives

Code	Title	Hours
Electives are shared across concentrations.		
College of Arts, Media and Design		
ARTG 5130	Visual Communication for Information Design	
ARTG 5320	Statistics for Design	
ARTG 5330	Visualization Technologies 1: Fundamentals	
ARTG 5610	Design Systems	
ARTG 5710	Design for Dignity	
ARTG 5910	Human-Centered Design	
ARTG 6110	Information Design Theory and Critical Thinking	
ARTG 6310	Design for Behavior and Experience	
ARTG 6460	Human-Centered AI	
EXRE 5020	Developing Extended Realities (XR)	
EXRE 5030	Designing Extended Realities (XR)	
GSND 5110	Game Design and Analysis	
GSND 6320	Psychology of Play	
GSND 6340	Biometrics of Design	
MUST 5510	Sound, Motion, and Computer Interaction	
Khoury College of Computer Sciences		
CS 5097	Mixed Reality	
CS 5170	Artificial Intelligence for Human-Computer Interaction	
CS 5345	Interactive Prototyping	
CS 5520	Mobile Application Development	
CS 5610	Web Development	
CS 6120	Natural Language Processing	
CS 6130	Affective Computing	
CS 6350	Empirical Research Methods	
CS 6760	Privacy, Security, and Usability	
CS 7250	Information Visualization: Theory and Applications	
CS 7260	Visualization for Network Science	
CS 7390	Special Topics in Human-Centered Computing	
Bouvé College of Health Sciences		
EXSC 5210	Physical Activity and Exercise: Prescription, Measurement, and Testing	
HINF 5300	Personal Health Interface Design and Development	
HLTH 5800	AI Across the Health Sciences	
PT 5170 and PT 5171	Motor Control and Lab for PT 5170	
PT 5321	Applications of Biomechanics in Human Function and Movement	
PT 7001	Core Concepts in Rehabilitation Science and Research	
PT 7005	Experimental Design and Applied Statistics	
PT 7020	Technologies in Movement and Rehabilitation Science	
College of Engineering		
DADS 6600	Computation and Visualization for Analytics	
EMGT 5300	Engineering/Organizational Psychology	
EMGT 6600	Engineering Team Performance	
IE 5137	Computational Modeling in Industrial Engineering	
IE 5630	Biosensor and Human Behavior Measurement	
IE 5640	Data Mining for Engineering Applications	
IE 6200	Engineering Probability and Statistics	
IE 6500	Human Performance	
IE 7215	Simulation Analysis	
IE 7280	Statistical Methods in Engineering	
IE 7315	Human Factors Engineering	

ME 5665	Musculoskeletal Biomechanics
ME 6250	Wearable Robotics