INDIANA UNIVERSITY
SCHOOL OF INFORMATICS AND COMPUTING
Department of Human-Centered Computing
IUPUI

PLAN OF STUDY
[SPRING 2022]

MASTER OF SCIENCE IN HUMAN-COMPUTER INTERACTION
School of Informatics and Computing (SoIC)

MS: 36 Credit Hours			
Required Core Courses (15 cr.)	**Required Selectives (9 cr.)**	**Open Electives (6 cr.)**	**Final Project (6 Cr.)**
H541, H543, H561, H563, H564	**Choose one**: {H565 or H517} **Choose one:** {H567 or H581 or H582, or N505} **Choose one:** {H566 or H570 or H583}	HCI Internship (INFO-I595): any 500-level course on campus that complements your HCI background. Recommended electives include: H567, I575, H554, PSY6000; *any selective course not taken as selective.*	MS Final Capstone Project: [**H680 and H681**, taken sequentially] or MS Thesis: 2 × H694 (*faculty approval required*)

	SPRING	SUMMER	FALL
YR 1	**H541** Interaction Design Practice **(O)** **H564** Prototyping for Interactive Systems **(O)** ***Choose one:*** **H567** IoT Interface Design for Business Innovation **H581** Experience Design & Eval. of Access technologies **H582** UX Design Ethics	• **Elective or** • **Internship***	**H543** Interaction Design Methods **(O)** **H563** Psychology of HCI **(O)** Also available: **H564** Prototyping for Interactive Systems ***Recommended Electives:*** **H567** IoT Interface Design for Business Innovation **I575** Informatics Research Design **H554** Independent Study in HCI (*faculty approval required*)
YR 2	**H561** Meaning and Form in HCI **(O)** **H680** HCI Professional Practice 1 ***Choose one:*** **H566** Experience Design and Ubiquitous Computing **H570** Tangible and Embodied Interaction (*only online*) **H583** Conversational User Interfaces (*only online*)	• **Elective or** • **Internship***	**H681** HCI Professional Practice 2 ***Choose one:*** **H565** Collaborative & Social Computing **H517** Visualization Design and Analysis
	NOTES: (O) = Additional Online section available		

FINAL PROJECT REQUIREMENTS

H680-H681 Capstone: The "default" graduation option for all MS students is the Final Capstone Project of 6 Cr. Hrs., consisting of the sequence H680 and H681.

1. H680 HCI Professional Practice 1 (3 cr.).
   - Prerequisites: all core courses in first two semesters.
2. H681 HCI Professional Practice 2 (3 cr.)
   - Prerequisites: H680
3. The H680/681 course sequence includes a formally scheduled in-class time that students must attend.
   - Students will work on one, final project (typically team-based) that extends throughout the two courses (fall and spring).
   - Students will receive an official grade at the conclusion of each course/semester.
   - Incompletes are NOT permitted.
   - The successful completion of the H680-H681 sequence (along with all other coursework) guarantees timely graduation for all students.

H694 Thesis: Upon permission granted by a faculty member who commits to be a thesis advisor, a student may replace the H680-H681 course with a H694 Thesis (6 credits). This option requires much more proactive commitment, time management, research skills and autonomy to the capstone and is granted only by a faculty member who is willing to accept the student as thesis advisor for at least two consecutive semesters. H694 will be considered completed only after the final thesis has been completed and approved by the thesis advisor and the committee members.

- Students taking the H694 Thesis Option **must take I575 – Research Design** as one of their elective courses. Based on the thesis advisor's recommendation and the nature of the thesis work, the student may take an alternative research methods course as an elective, if useful to the completion of thesis.

Detailed schedule of each course is updated and published every semester on the IUPUI Registrar's Website.

HCI Professional Internship (I595)

(Equivalent to Elective Courses)

The Informatics Career Services Office assists students with finding HCI-related Internships (e.g., summer semesters) to gain valuable professional experience within the HCI industry prior to graduation. **Up to 6 credits of internships (course I595) may be counted towards elective credits. Credit for an internship should be requested prior to the starting date of the internship since retro-credit is not permitted**. Once approved authorization is given to register for an online credit internship course. Please contact **Career Services (soiccso@iupui.edu)** to learn more about internship opportunities and the credit internship evaluation and approval process.

Area of Emphasis in Digital Making

MS HCI students can pursue an area of emphasis in digital making by completing **9-12 credit hours** of Media Arts and Science graduate-level sections that count towards 6 elective credits and 3-6 credits of selective courses in the HCI MS programs. The area of emphasis in digital making allows students to complement their HCI preparation with *application development skills to produce interactive media experiences and environments*, and explore their connections with local businesses as well as the national industry. This area of emphasis is particularly well-suited to HCI MS students with a solid programming background. The Media Arts and Science graduate-level sections available for this area of emphasis include:

- NEWM N585 Motion Graphics (3 cr.)
- NEWM N505 Advanced Issues in Emerging Media Environments (3 cr.)
- NEWM-N 585 Experiential Innovation I – Advanced Visualization (3 cr.)
- NEWM-N 585 Real-world Emerging Wearable Technology Applications for Enterprise Business (3 cr.)

Additional digital making courses may become available. Check with the Department Chair (dbolchin@iupui.edu) for updates.

Potential Elective Courses

(Students MUST Check for Prerequisites and Course Availability from the Respective Schools and Departments on campus)

OTHER ELECTIVE COURSES IN HUMAN-CENTERED COMPUTING

Entrepreneurship: H550 Legal and Business Issues in Informatics
Project Management: B505 Project Management.

PSYCHOLOGY

PSY570 Industrial Psychology – Fall, odd yr
PSY572 Organizational Psych – Sping, even yr
PSY615 Physiological Psych – Fall, even yr
PSY640 Social Psychology I – Fall, odd yr
PSY655 Cog Development – Fall, even yr

COMPUTER SCIENCE

CSCI 507 Object-Oriented Design & Prog
CSCI 537 Intro to Distributed Computing
CSCI 541 Database Systems
CSCI 550 Computer Graphics
CSCI 552 Advanced Graphics and Visualization
CSCI 565 Programming Language

DESIGN (HERRON)

HER-V500: Visual Design for User Interfaces (3 credits)
HER–V501 Design Thinking (1.5 cr.)
HER–V502 Human Factors in Design (1.5 cr.)
HER–R511 Visual Research (3 cr.)

COMMUNICATION

COMM–C 500 Advanced Comm Theory
COMM–C 531 Media Theory and Criticism
COMM–C 592 Advanced Health Communication
COMM–C 620 Computer-Mediated Communication

SOCIOLOGY

SOC–R 556 Advanced Sociological Theory I
SOC–R 557 Advanced Sociological Theory II
SOC–R 559 Intermediate Sociological Statistics
SOC–R 593 Applied Fieldwork for Sociologists
SOC–S 530 Introduction to Social Psychology

GEOGRAPHY

GEOG–G 536 Advanced Remote Sensing
GEOG–G 537 Computer Cartography and Graphics
GEOG–G 538 Intro to Geographic Information Systems
GEOG–G 539 Advanced Geographic Information Systems

OTHERS

ANTH 501 Fundamentals of Applied Anthropology
ED 531 Computers in Education
SLIS–S 532 INFO Architecture for the Web