



PLAN OF STUDY
[SPRING 2019]

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

MS: 36 Credit Hours			
Required Core Courses (18 cr.)	Required Selectives (6 cr.)	Open Electives (6 cr.)	Final Project (6 Cr.)
H541, H543, H561, H563, H564, H566.	Choose one: {H565 <u>or</u> H517} Choose one: {H567 <u>or</u> I590 Accessibility <u>or</u> N505}.	HCI Internship (I595), any 500-level course on campus that complements your HCI background. Recommended electives include: I575, H554, PSY6000, and selective courses not taken as selective.	MS Capstone: [H680 and H681, taken sequentially] <u>or</u> MS Thesis: 2 × H694 (<i>faculty approval required</i>)

	SPRING	SUMMER	FALL
Y R 1	H541 Interaction Design Practice (O) H564 Prototyping for Interactive Systems (O) <u>Choose one:</u> H567 IoT Interface Design for Business Innovation I590 Experience Design and Eval. of Access technologies N505 Advanced issues in Emerging Media Environments	• Elective or • Internship*	H543 Interaction Design Methods (O) H563 Psychology of HCI (O) <i>Recommended Electives:</i> H567 IoT Interface Design for Business Innovation I575 Informatics Research Design H554 Independent Study in HCI (faculty approval required)
Y R 2	H566 Experience Design and Ubiquitous Computing H561 Meaning and Form in HCI (O) H680 HCI Professional Practice 1	• Elective or • Internship*	H681 HCI Professional Practice 2 <u>Choose one:</u> H565 Collaborative & Social Computing H517 Visualization Design and Analysis
NOTES: (O) = Also taught Online			

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.

- H680 HCI Professional Practice 1 (3 cr.).
 - Prerequisites: all core courses in first two semesters.
- H681 HCI Professional Practice 2 (3 cr.)
 - Prerequisites: H680
- 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 website](#).

HCI 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 (soiccco@iupui.edu)** to learn more about internship opportunities and the credit internship evaluation and approval process.

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 (contact: Sara Hook).

Project Management: B505 Project Management.

UX/HCI: H590 User Experience Architectures (contact: Davide Bolchini).

Game Design: N534 Serious Games and Simulations; 500-level sections of Game Production courses (contact: Mat Powers).

3D Graphics/Animation: 500-level sections of 3D Graphics and Animation courses (contact: Zeb Wood).

Web Design/Development: N504 Advanced Int. App. Design; 500-level sections of Web Design/Dev. courses (contact: Todd Shelton, Travis Faas).

Digital Media and Healthcare: N507 Digital Media for Healthcare (contact: Edgar Huang).

Video Production: 500-level sections of Video Production courses (contact: C. Thomas Lewis).

PSYCHOLOGY

PSY570 Industrial Psychology – Fall, odd yr

PSY572 Organizational Psych – Spring, 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-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

Other Research Methods Courses

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

ANTH-E404 Field Meth in Ethnography

COM 501 Qualitative Research

COM 502 Applied Qualitative Research Methods

EDU 520 Strategies for Educational Inquiry

EDU 611 Qualitative Inquiry in Education

NURS-L 650 Data Ana for Clinical & Admin Decis-Making

NURS-R 612 Interpretive Data Analysis (2 Cr.), Summer I-II

PSY 600 Statistical Inference (Fall Even Yr)

PSY 601 Experimental Design (Spg Even Yr)

PSY 608 Measurement Theory and Interpret Data

PSY 640 Survey of Social Psychology I

PSY 655 Cognitive Development (Fall Even Yr)

PSY-I 643 Field Methods & Exper

SOC-R 551 Quantitative Methods – Sociology

SOC-R 559 Intermediate Soc Statistics

STAT 511 Statistical Methods 1

STAT 512 Applied Regression Analysis

STAT 516 Basic Probability Appl

STAT 519 Intro to Probability