# PLAN OF STUDY

## FALL 2017

### MASTER OF SCIENCE IN HUMAN-COMPUTER INTERACTION

School of Informatics and Computing (SoIC)

<table>
<thead>
<tr>
<th>MS: 36 Credit Hours</th>
<th>Program Core</th>
<th>Electives or HCI Internship</th>
<th>Final Project</th>
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</thead>
<tbody>
<tr>
<td>H541, H543, H561, H563, H564, I501, [H565 or H517], H566</td>
<td>Recommended Electives (see also next page): I595, I575, H554</td>
<td>[H680, H681] or 2 x H694</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Year</th>
<th>Elective Course</th>
<th>Recommended Electives (see also next page)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>H541 Interaction Design Practice [R 6pm]</td>
<td>H561 Meaning and Form in HCI [M 6pm]</td>
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<tr>
<td></td>
<td>H543 Interaction Design Methods [M 6pm]</td>
<td>H564 Prototyping for Interactive Systems [W 10am]</td>
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<td>Choose one:</td>
<td>H566 Experience Design and Ubiquitous Computing [R 6pm]</td>
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<td>H565 Collaborative &amp; Social Computing [T 6pm]</td>
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<td>H517 Visualization Design, Analysis, and Evaluation [W 12pm]</td>
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<td>2</td>
<td>H563 Psychology of HCI [W 6pm]</td>
<td>I501 Introduction to Informatics for HCI [W 6pm]</td>
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<td>H680 HCI Professional Practice 1 [R 6pm]</td>
<td>H681 HCI Professional Practice 2 [R 6pm]</td>
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### FINAL PROJECT REQUIREMENTS

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

1. **H680 HCI Professional Practice 1** (3 cr.):
   - Prerequisites: H541, H543, H561, I501, H565, H566
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, individual final project that extends throughout the two courses (fall and spring).
   - Students will receive an official grade at the conclusion of each course/semester.
   - Students are encouraged to propose a project that can be realistically completed by the conclusion of H681, the Spring semester.
   - Incompletes are NOT permitted.
   - The successful completion of the H680-H681 sequence (along with all other coursework) guarantees timely graduation for all students.
   - Students completing H681 are required to present their project results as a poster at the Capstone event.

**H694 Thesis Option:** Upon permission granted by a faculty member who commits to be a thesis supervisor by the end of Summer of the first year, a student may replace the H680-H681 course with a H694 Final Project or Thesis (6 credits). This option requires much more proactive commitment, time management, research skills and autonomy to the student than H680-H681 and is granted only by a faculty member who is willing to accept the student as thesis supervisor for at least two consecutive semesters. H694 will be considered completed only after the thesis delivered has been approved by the supervisor, and defended in front of a faculty thesis committee.

- 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 additional 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 (soiccso@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)

**OTHER ELECTIVE COURSES**

IN THE HUMAN-CENTERED COMPUTING DEPARTMENT

- **Entrepreneurship:** H550 Legal and Business Issues in Informatics (contact: Sara Hook).
- **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 Fass).
- **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).

**RELEVANT ELECTIVES IN BIOHEALTH INFORMATICS DEPARTMENT**

- **Project Management:** B505 Project Management.
- **Health Informatics and Human Factors:** B626 Human Factors Engineering for Health Informatics

**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 (Spring Even Yr)
- **PSY 608** Measurement Theory and Interpre 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