PLAN OF STUDY

SPRING 2018

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

MS: 36 Credit Hours

<table>
<thead>
<tr>
<th>Program Core</th>
<th>Electives or HCI Internship</th>
<th>Final Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>H541, H543, H561, H563, H564, I501, [H517 or H565], H566</td>
<td>Recommended Electives (see also next page): I595, I575, H554, H567</td>
<td>[H680, H681] or H694 x 2</td>
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<tr>
<td>24 Cr. Hr.</td>
<td>6 Cr. Hr.</td>
<td>6 Cr. Hr.</td>
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<tr>
<th>SPRING</th>
<th>SUMMER</th>
<th>FALL</th>
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<tbody>
<tr>
<td>YR 1</td>
<td></td>
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<tr>
<td>H541 Interaction Design Practice</td>
<td>[R 6 pm]</td>
<td>H543 Interaction Design Methods</td>
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<tr>
<td>H564 Prototyping for Interactive Systems</td>
<td>[W 6 pm]</td>
<td>H563 Psychology of HCI</td>
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<tr>
<td>I501 Introduction to Informatics for HCI</td>
<td>[M 6pm]</td>
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Choose one:
- H565 Collaborative & Social Computing [T 6 pm]
- H517 Visualization Design and Analysis [W 12 pm]

YR 2

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<tr>
<th>H566 Experience Design and Ubiquitous Computing (TBD)</th>
<th>[T 3 pm]</th>
<th>H681 HCI Professional Practice 2 [T 6pm]</th>
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<tbody>
<tr>
<td>H561 Meaning and Form in HCI</td>
<td>[W 6 pm] (O)</td>
<td>Recommended Electives:</td>
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<tr>
<td>H680 HCI Professional Practice 1</td>
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<td>- H567 Internet-of-Things Interface Design for Business Innovation</td>
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<td>- I575 Informatics Research Design</td>
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<td>- H554 Independent Study in HCI (Faculty Approval Required)</td>
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NOTES: (O) = Also taught Online

FINAL PROJECT REQUIREMENTS

H680-H681: The “default” graduation option for all MS students is the Final 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, 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.

H694 Final Project/Thesis Option: Upon permission granted by a faculty member who commits to be a thesis or final project 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 project/thesis supervisor for at least two consecutive semesters. H694 will be considered completed only after the final project/thesis delivered has been approved by the supervisor 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 additional research methods course as an elective, if useful to the completion of thesis.
- Also note that if you are strictly doing a H694 Final Project (and NOT the Thesis), I575 is NOT required.

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))

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 – 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
CSCI 559  Computer Graphics
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

**SOCIOLGY**
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
EDU 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 I
STAT 512  Applied Regression Analysis
STAT 516  Basic Probability Appl
STAT 519  Intro to Probability