Human-Computer Interaction (HCIN)

Human-Computer Interaction (HCIN) Courses

HCIN 5100 [0.5 credit]
Fundamentals of HCI Design and Evaluation
Strategies and practices in HCI design and evaluation. Students will learn to perform studies in user interface analysis and design, read research literature critically, distill important points from readings, summarize, write papers, design user interfaces and present their work. Precludes additional credit for PSYC 5105 (no longer offered).

HCIN 5200 [0.5 credit]
Software and User Interface Development
Design and development of user interfaces for software systems based on principles for supporting user interaction, with emphasis on frameworks, tools, and processes for user interface development.

HCIN 5300 [0.5 credit]
Emerging Interaction Techniques
Advanced interaction styles and their associated technologies. Topics may include hand held and gestural interactions, ubiquitous computing, deformable user interfaces, physiological computing and tangible user interfaces.

HCIN 5400 [0.5 credit]
Experimental Methods and Statistics
An introduction to the design of experiments and the statistics needed to interpret data.

HCIN 5403 [0.5 credit]
Research methods in HCI
An introduction to quantitative and qualitative research methods in HCI. Students will acquire skills in collecting and analyzing HCI data, presenting the findings and specifying practical implications.

HCIN 5404 [0.5 credit]
Design Research Methods
Critical review of qualitative and quantitative research methods to support interdisciplinary design. Methods used by collaborators from the sciences and humanities as well as methods designers bring to interdisciplinary collaborations are introduced. Research for design, research through design and theoretical frameworks are discussed.

HCIN 5405 [0.5 credit]
Methodologies for Discrete-Event Modelling and Simulation

HCIN 5406 [0.5 credit]
Object-Oriented Software Development

HCIN 5407 [0.5 credit]
Virtual and Augmented Reality Technology
Research in and design of virtual/augmented reality systems. Applications, history, human factors, display and input hardware, and interaction techniques for navigation, selection and manipulation. Students develop and evaluate a VR/AR system using modern game engines and 3D hardware devices such as head-mounted displays.

HCIN 5501 [0.5 credit]
Directed Studies
Independent study under supervision of a member of the Human/Computer Interaction faculty. Students are required to obtain their supervisor's written approval prior to registration and are limited to one such course in their program.

HCIN 5900 [0.5 credit]
Advanced Topics
Topics not ordinarily treated in the regular course program due to their contemporary subject matter. The choice of topics varies from year to year. Details will be available at the time of registration.

HCIN 5909 [2.5 credits]
Thesis in Human-Computer Interaction