CSCI 4927  
Human Computer Interaction

Credit Hours: 3
Contact Hours: 3

Course Coordinator: Jessica Keup

Text(s):

*Interaction Design: Beyond Human-Computer Interaction*, H. Sharp, Y. Rogers, J. Preece, 2007 (Recommended)

Catalog Description:

Students learn how to assess and improve the user experience between humans and electronic devices and to design systems that enable individuals to make more effective use of computers by creating better user interfaces.

Prerequisite(s): CSCI 3250

CS: MAJOR ELECTIVE

IS: MAJOR ELECTIVE

IT: REQUIRED

Course Outcomes:

Understand how human computer interface (HCI) relates to other aspects of software engineering. ETSU Outcomes 5a, IT-3; ABET Outcomes b, IT-n

Understand basic human and machine factors that influence the development of interactive computing systems. ETSU Outcomes 2a, IT-1b; ABET Outcomes IT-k

Gain basic skills and knowledge for user interface design. ETSU Outcomes IT-1a; ABET Outcomes f, IT-m

Acquire skills in integrating HCI into the system development life-cycle (analysis, design, implementation, evaluation). ETSU Outcomes 5a, IT-3; ABET Outcomes c

Develop an appreciation for user-centered design. - ETSU Outcomes IT-1b, IT-3; ABET Outcomes IT-k

Learn at least one development methodology and one toolkit for prototyping/implementing user interfaces. - ETSU Outcomes 5c; ABET Outcomes i

Gain awareness of other tools and methods available. - ETSU Outcomes 5a; ABET Outcomes i

Develop at least one user interface. - ETSU Outcomes IT-3; ABET Outcomes IT-k
Major Topics:

- Introduction to human computer interaction (HCI)
- User interface development
- Importance of good interfaces
- Usability
- Interaction models and dialog types for interfaces
- User interface life-cycle
- User-centered design and task-analysis
- Prototyping and the iterative design cycle