

Course Title	Human Computer Interaction				
Course Code	CSE340				
Course Type	Compulsory				
Level	Bachelor (1 st cycle)				
Year / Semester	3 rd Year / 5 th Semester				
Teacher's Name	TBA				
ECTS	6	Lectures / week	3 hours / 14 weeks	Laboratories / week	None
Course Purpose and Objectives	The aim of this course is to provide the student with a basic knowledge of Human-Computer Interaction (HCI) and investigate specific issues involving HCI and user-interface design. Design methodologies for optimum Human Computer Interaction Systems and evaluation methods for HCI systems will be presented. Contemporary topics in HCI (i.e.-alternative human sensory channels for interacting with computers, GroupWare and customizable computer systems) will also be investigated.				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> • Apply a variety of human computer interaction theoretical models. • Design a user interface from specification to completion. • Design a user manual for a substantial piece of software. • Describe non-WIMP interaction styles and their theoretical bases. 				
Prerequisites	CSE200	Co-requisites	None		
Course Content	<p>Introduction: What is HCI, Significance of proper HCI in computer systems. Capabilities and limitations of humans and computers – Input Output channels, information storing and information processing, reasoning. Psychology and the design of interactive systems. Models of interaction, Ergonomics, Interaction Styles, Universal Usability</p> <p>Design of HCI systems: Paradigms for Interaction, Principles to support Usability, The design process, design rules, usability engineering, Iterative design and prototyping.</p> <p>Models of the User/System in Design: Cognitive models, goal and task hierarchies, Linguistic models, physical and device models. Standard Formalisms, Interaction models, Status - Event Analysis.</p> <p>Task Analysis: Task decomposition, knowledge based analysis, Relationship based techniques.</p>				

	<p>Implementation Support: Elements of windowing systems, user interface management systems.</p> <p>Evaluation of an interaction system: Goals of evaluation, evaluation styles, evaluating the design/implementation. Choosing an evaluation method.</p> <p>Help and Documentation: Requirements of User support. Approaches to user support, Intelligent help systems.</p> <p>Contemporary topics in HCI: Groupware: Introduction, Meeting and Decision support systems, Shared applications, Frameworks for Groupware. Computer-mediated communication.</p>						
Teaching Methodology	Face-to-face						
Bibliography	<p>Preece, J., Sharp, H. and Rogers, Y. (2015) Interaction Design, Wiley</p> <p>Shneiderman, B., Plaisant, C., Cohen, M., Jacobs, S., Elmqvist, N. and Diakopoulos, N. (2016) Designing the User Interface: Strategies for Effective Human-Computer Interaction, Pearson.</p>						
Assessment	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Examinations</td> <td style="text-align: center;">70%</td> </tr> <tr> <td>Assignments</td> <td style="text-align: center;">20%</td> </tr> <tr> <td>Class Participation and attendance</td> <td style="text-align: center;">10%</td> </tr> </table>	Examinations	70%	Assignments	20%	Class Participation and attendance	10%
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Language	English						