

Human Computer Interaction	
Course Code:	SEN-487
Credit Hours:	3
Pre requisite:	Software Engineering -I
Objectives:	<p>Course introduces the main concepts of designing, evaluating and functional deploying, effectual technologies in a range of circumstance - be it office, home, school, internet world or other domain.</p> <p>The objective of this course is to give an introduction to the key areas, accessing and design developments in the field. The course aims, understanding and importance of UI its design and mistakes. The course helps to learn basics concepts of field such as, design rules and guidelines, prototyping and design patterns for interactive systems.</p>
Course Learning Outcomes (CLOs):	<p>CLO 1: (C2): Acquire fundamental concepts of computer components functions regarding interaction with human and vice versa.</p> <p>CLO 2: (C4): Analyze interface problems to recognize what design approach and interaction styles is required in the light of usability standards and guidelines.</p> <p>CLO 3: (C4): Utilize basic concepts to construct a user-interaction strategy for a given problem its usability evaluation and to meet desired needs within realistic constraints such as social, political and ethical norms.</p> <p>CLO 4: (C4): Ability to design and develop an interface by using appropriate HCI techniques that are preferred by the user.</p>
Course Outline:	<ul style="list-style-type: none"> ➤ Introduction to HCI ➤ History & Usages ➤ Human Cognition ➤ Computer Input Output Channels ➤ Interaction Styles ➤ Interaction Paradigms ➤ Design Patterns ➤ Interface Design Rules ➤ Guidelines and Standard for User Interfaces ➤ User Interface Evaluation Techniques ➤ Prototyping ➤ Screen Design and Layout ➤ GUI Mistakes <p>Recent Paradigms of Human-Computer Interaction</p>

Resources:	<ul style="list-style-type: none"> • A. Dix, J. Finlay, G. Abowd and R. Beale. <i>Human Computer Interaction, Third Edition</i>, Prentice Hall, 2003 • B. Shneiderman. <i>Designing The User Interface, Third Edition</i>, Addison Wesley, 1998. • J. Preece, Y. Rogers, H. Sharp, D. Benion. S.Holland, and T.Carey. <i>Human Computer Interaction</i>, Addison Wesley, 1994
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Mapping of CLOs to PLOs (Program Learning Outcomes)

PLOs	CLOs			
	CLO 1	CLO 2	CLO 3	CLO 4
PLO:1 (Engineering Knowledge)	X			
PLO:2 (Engineering Problem Analysis)	X	X		
PLO:3 (Designing and Development)		X	X	X
PLO:4 (Investigation)		X		X
PLO:5 (Modern tool usage)				X
PLO:6 (Engineer and Society)			X	X
PLO:7 (Environment and sustainability)			X	X
PLO:8 (Professionalism and Ethics)			X	X
PLO:9 (Communication)	X	X		
PLO:10 (Individual and Team Work)				X
PLO:11 (Life long learning)	X	X	X	X
PLO:12 (Project Management)				

Mapping of CLOs to Course Assessment

PLOs	CLOs			
	CLO 1	CLO 2	CLO 3	CLO 4
Assignments	X		X	X
Quizzes	X	X		
Project			X	X
Midterm Exam	X	X		
Final Exam		X	X	

