

Course Name	Human-Computer Interaction	Course Code	ITEC-321			
Credit Hours	3	Contact Hours	Theory	Case Study	Total	
			2	2	4	
Offered as	☐ University Requirement ☒ College Requirement ☒ Program Requirement ☒ Core ☐ Elective ☒ ITEC ☒ COMP ☐ CNET					
Level	5	Prerequisite	Nil			
Course Description: This course provides a comprehensive introduction to the usability methods in the dynamic field of human-computer interaction (HCI). Students will learn principles, guidelines and theories needed to develop high quality interface designs. Different interaction methods will also be addressed. Numerous examples of direct manipulation give students an understanding of excellence in interaction and related design principles. The advancements in virtual environments and their applications are also dealt with. Studying various aspects of social media and collaborative technologies will understand the usability of technologies among human diversity. It also provides updates on current HCI topics, interaction devices and interfaces. Study cases are also designed for higher learning with different scenarios in human-computer interaction.						
On completion of this course, the students will be able to: ◆ Describe how the usability is obtained using various methods. ◆ Summarize the guidelines, principles & theories of interaction. ◆ Comprehend various interaction styles and their impact in computing environments. ◆ Utilize the emerging technologies of visual and auditory channels of interaction with virtual environments ◆ Evaluate various methods of collaboration & Social media interaction. ◆ Assess the quality of services and user productivity. ◆ Figure out the techniques of information visualization for effective information Assimilation. ◆ Study cases of usability problems in Human-Computer Interaction						
Grading	☒ Mid-Term Exam	15%	☒ Assignment-1	10%	☒ Assignment-2	15%
	☒ Case Study & Presentation	20%	☒ Final Theory	40%		
Text Books: • Ben Shneiderman, Catherine Plaisant, Maxine Cohen, Steven Jacobs, Designing the User Interface: Pearson New International Edition: Strategies for Effective Human-Computer Interaction, 6/E, Pearson, 2016						
References: ◆ Yvonne Rogers, Helen Sharp and Jenny Preece, Interaction Design: Beyond Human-Computer Interaction, John Wiley & Sons, 5/e, 2019, ISBN-10: 0470665769 ◆ Julie A Jacko, The Human-computer Handbook, Fundamentals, Evolving technologies, and Emerging technologies, 2012, Third Edition, CRC Press ◆ The Encyclopedia of Human-Computer Interaction, 2/e, Online resource: http://www.interaction-design.org/books/hci.html						