

INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI

भारतीय प्रौद्योगिकी संस्थान तिरुपति

Yerpedu-Venkatagiri Road, Yerpedu Post, Tirupati District, Andhra Pradesh - 517 619

1.	Title of the course	User Interface Design and Development
2.	Course number	CS543L
3.	Structure of credits (L-T-P-C)	3-0-0-3
4.	New course/modification to	New
5.	To be offered by	Computer Science and Engineering
6.	Prerequisite	СоТ
7.	Course Objective(s): To analyze and create user interfaces based on design principles and techniques.	
8.	Course Content: Introduction to User Interface (UI) design, Human-Computer Interaction (HCI), Human-Machine Interaction, Usability and accessibility, Qualitative and quantitative data-driven techniques for UI requirements, Techniques for building UIs: design process and principles, interaction, visualizations, virtual and augmented reality (VR/AR), Design frameworks, libraries and tools, Artificial intelligence for UIs, Prototyping and evaluation.	
9.	Textbook(s): 1. Shneiderman B, Plaisant C, Cohen MS, Jacobs S, Elmqvist N and Diakopoulos N, Designing the User Interface: Strategies for Effective Human-Computer Interaction, 6th Edition, Pearson (2016).	
10.	Reference(s): 1. Rogers Y, Sharp H, and Preece J, Interaction Design: Beyond Human-Computer Interaction, 6th Edition, John Wiley & Sons (2023). 2. Norman DA, The Design of Everyday Things, Basic Books (2014).	