

**SES's L.S. RAHEJA COLLEGE OF ARTS AND COMMERCE(AUTONOMOUS)**



**BOARD OF STUDIES:** Information Technology and Data Science

**PROGRAMME:** Bachelor of Science (Information Technology)

**SEMESTER:** IV

**NOMENCLATURE OF THE COURSE:** Fundamentals of UI/UX Designing

**NEP Vertical:** SEC

**Credit:** 02

(As Per Choice Based Credit System (under NEP 2020) with effect from the academic year 2025-26)



Programme:	Bachelor of Science (Information Technology)
Nomenclature of the Course	Fundamentals of UI/UX Designing
Total Marks	50
Semester:	IV
Academic year	2025-26

**LEARNING OBJECTIVES:**

1. Identify and analyze the latest UI patterns and trends in graphical user interface design.
2. Demonstrate the iterative user-centered design process in the development of graphical user interfaces.
3. Apply UI designs effectively across different devices and user requirements, ensuring responsive and functional interfaces.
4. Create innovative and functional design prototypes for various applications, incorporating modern UI patterns and user-centered principles.

**COURSE OUTCOMES:**

1. To understand Latest UI patterns
2. Understand iterative user-centered design of graphical user interfaces
3. Apply the user Interfaces to different devices and requirements,
4. Create innovative design prototype for given applications.

Unit	Course Content	Andragogy	No of Lectures
I	<p><b>1.1 Design Thinking Fundamentals:</b> Introduction to Design thinking – Concept, Purpose, 5 stages of design thinking – Empathize, Define, Ideate, Prototype, Test Introduction to User Interface / User Experience (UI/UX) – Definition of Design with respect to digital media, User Interface, User experience, Difference between UI and UX. History of UX. Need of UI and UX</p> <p><b>1.2 User Requirements and its Analysis:</b> Introduction to research and analysis tool (freeware) such as FigJam, User requirements – Definition, Types of user research - Qualitative research, Quantitative research. Tools to collect user requirements – personal observation, interviews, questionnaire, User/ Expert reviews, User requirement analysis - Understanding target audience and client requirements, Competitive analysis, Affinity mapping, Defining User Persona</p> <p><b>Case study:</b> Sketching the steps users take to achieve goals within an interface.</p>	<ul style="list-style-type: none"> <li>• Use real-life examples: Incorporate real-life examples into lessons.</li> <li>• Give students problems: Provide problems for students to solve independently or in groups.</li> <li>• Focus on practical applications: Present knowledge and abilities in terms of their practical uses.</li> </ul>	15

II	<p><b>2.1 User Interface Design :</b> Storyboarding, User journey mapping, Gestalt principles of design - Aesthetics in UI design - Using Light, Color and Contrast Effectively in UI Design, Introduction to any freeware design tool such as Figma, Visual Communication Design - effective visual communication for graphical user interface</p> <p><b>2.2 User Experience Design Tool:</b> Introduction to User Experience design, UX design open source tool such as - Figma features – Navigations, interactions, Buttons Creating library, Gamification, micro-animation Creating visual identity of the project – design system, design theme</p> <p><b>2.3 Prototyping and Testing:</b> Introduction to Wireframing - Purpose of wireframing, Types – low fidelity, medium fidelity, high fidelity, Elements used in wireframing – visual design, high fidelity elements, Prototyping and Testing</p> <p><b>Case study:</b></p> <ul style="list-style-type: none"> <li>• Creating interactive mockups to test and refine designs.</li> <li>• Design Systems: Developing consistent component libraries and guidelines</li> </ul>	<ul style="list-style-type: none"> <li>• Use real-life examples: Incorporate real-life examples into lessons.</li> <li>• Give students problems: Provide problems for students to solve independently or in groups.</li> <li>• Focus on practical applications: Present knowledge and abilities in terms of their practical uses.</li> </ul>	15
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#### SUGGESTED READINGS

1. Unger, R., & Chandler, C. (2012). A project guide to UX design: For user experience designers in the field or in the making (2nd ed.). New Riders Publishing.
2. Garrett, J. J. (2011). The elements of user experience: User-centered design for the web and beyond (2nd ed.). Pearson Education.
3. Galitz, W. O. (2007). The essential guide to user interface design: An introduction to GUI design principles and techniques (3rd ed.). Wiley Publishing.
4. Hartson, R., & Pyla, P. S. (2012). The UX book: Process and guidelines for ensuring a quality user experience. Elsevier.

## QUESTION PAPER PATTERN

### (A) FOR CONTINUOUS EVALUATION

Particulars	Marks
Practical Implementation	10
Assignment/Presentation	10
<b>Total</b>	<b>20</b>

### (B)

### QUESTION PAPER PATTERN FOR SEMESTER END EXAMINATION

Maximum Marks: 30

Duration: 1 Hours

Question No.	Description	Total Marks
Q. 1	<b>Attempt the following Unit I</b>	<b>15</b>
A	Remembering	
B	Analysing	
C	Applying	
	<b>OR</b>	
P	Remembering	
Q	Analysing	
R	Applying	
Q. 2	<b>Attempt the following Unit II</b>	
A	Understand	
B	Creating	
C	Creating	
	<b>OR</b>	
P	Understand	
Q	Creating	
R	Creating	