

NIRMA UNIVERSITY

Institute:	Institute of Technology
Name of Programme:	BTech All (Other than CSE)
Course Code:	3CS522IE24
Course Title:	UI-UX Design
Course Type:	Interdisciplinary Minor-Elective
Year of Introduction:	2024-25

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Course Learning Outcomes (CLO):

At the end of the course, the students will be able to –

1. explain the iterative user-centered design of graphical user interfaces (BL2)
2. apply the user Interfaces to different devices and requirements (BL3)
3. evaluate UX design, including information modeling, requirement gathering, and content management (BL5)
4. interpret high-fidelity visual designs by converting wireframes, incorporating principles of Gestalt Theory, and considering various screen types. (BL5)

Unit	Contents	Teaching Hours (Total 45)
Unit-I	<p>Introduction to UI/UX: The Relationship Between UI and UX, Roles in UI/UX, A Brief Historical Overview of Interface Design, Interface Conventions, Approaches to Screen Based UI, Template vs Content, Formal Elements of Interface Design, Visual Communication design component in Interface Design,</p> <p>Foundation of UX design: Visual Design Principles, Functional Layout, Interaction design, Navigation Design, User Testing, Developing and Releasing design, Information architecture and sitemaps, User journey maps</p> <p>Interaction design: task flows, Overview of grids & page types, Developing low/high fidelity wireframes</p>	12
Unit-II	<p>User Research: Role of research in the UX design process, Overview of research methods, Introduction to heuristic testing, Reading user personas and empathy maps.</p>	08
Unit-III	<p>Visual Design and UI: Principles of visual design, including Gestalt Theory, Colour & typography for UI, Interactions and micro-interactions, understanding various sections of a screen (Web, iOS, and Android), Converting wireframes into high fidelity visual design, Design for devices: understanding web & mobile</p>	07
Unit-IV	<p>UX Strategy: Information modelling: hierarchies and relationship Gathering requirements, working with content: inventory, sorting, schema, labeling, way-finding, Overview of e-commerce platforms, Understanding mobile apps, Design process, Introduction to project management</p>	08



Unit-V **Brand Experience Design: Brand strategy:** business goal, purpose, values, audience, persona and positioning, **Elements of visual identity:** typography, colour, iconography, patterns, Visual design for various page types 10
Introduction to design system: elements, components, patterns, pages and assets, and portfolio development.

Self-Study:

The self-study contents will be declared at the commencement of the semester. Around 10% of the questions will be asked from self-study contents

Suggested Readings/ References:

1. Russ Unger and Carolyn Chandler, A Project Guide to UX Design: For user experience designers in the field or in the making, New Riders Publishing.
2. Jesse James Garrett, The Elements of User Experience: User-Centered Design for the Web and Beyond, Second Edition, Pearson Education.
3. Wilbert O. Galitz, The Essential Guide to User Interface Design: An Introduction to GUI Design Principles and Techniques, Wiley
4. Don Norman, The Design of Everyday Things, Basic Books Publishing
5. Jesmond Allen, James Chudley, Smashing UX Design: Foundations for Designing Online User Experiences, John Wiley & Sons

Suggested List of Experiments: -NA-