INSTITUTE OF DESIGN
Nirma University
Product and Interaction Design and Communication Design
Semester VI

Institute:	**Institute of Design**
Name of Programme:	**Bachelor of Design**
Course Code:	**3DD309ME26**
Course Title:	**Design of Digital Products**
Course Type:	(☐ Core/ ☐ Value Added Course/ ☐ Departmental Elective/ ■ Institute Elective/ University Elective/(Open Elective Any other)
Year of introduction:	**Academic Year 2026-27**

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		LPW	**PW**	**W**	**S**	
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Course Learning Outcomes (CLO):

At the end of the course, the student will be able to:

1. Explain fundamental principles of User Experience (UX) and User Interface (UI) Design. (BL 2)
2. Analyse data from the user research to identify user needs, behaviours and design opportunities. (BL 4)
3. Develop user-centred digital-product concepts using appropriate interaction, information architecture and interface-design methods. (BL 6)
4. Evaluate interactive prototypes through usability testing and refinement. (BL 5)

Content: **Total Teaching hours: 90 Hrs**

Units	Content	Teaching hours
Unit 1	**Digital Applications & User Experiences (UX):** • Evolution of Digital Products and Experiences • Understanding Web, Native and Cross-platform Applications • Operating Systems and Platform Guidelines (Windows, Android, iOS) • User Experience Principles and Interaction Models • Notification, Personalisation and Recommendation Systems	**12 Hrs**
Unit 2	**Digital Product Strategy:** • Product Discovery and Opportunity Identification • Market Research and Competitive Analysis • Product Strategy and Value Proposition • Minimum Viable Products (MVPs) • Product Analytics and Success Metrics (KPIs) • AI Design Thinking and AI-powered User Experiences	**12 Hrs**

Unit 3	**User Interface Design (UI):** • Design Systems: Rules, Guidelines and Standards • Responsive Design • Designing for One-Handed and Two-Handed Use • Voice and Conversational Interfaces	**30 Hrs**
Unit 4	**Prototyping Minimum Viable Product:** • Digital Accessibility and Inclusivity • Design optimisation: Power consumption, OS, Performance • Low Fidelity Prototyping • Usability Testing and Iteration	**36 Hrs**

Self-Study	**Maintain a journal of the following:** • Analyse commonly used digital products for UX and UI patterns • Study examples of information architecture and design systems • Explore digital-product case studies and interaction-design decisions • Practice prototyping and usability evaluation using appropriate tools
Suggested Readings/ References	**Books** 1. Jesse James, (2011). *The Elements of User Experience: User-Centered Design for the Web*, New Riders 2. Mike Kuniavsky, (2003). Observing the *User Experience: A Practitioner's Guide to User Research*, Morgan Kaufmann 3. Bill Buxton, (2011). *Sketching User Experiences: Getting the Design Right and the Right Design Book*, Morgan Kaufmann 4. Jeffrey Rubin, (2008). *Handbook of Usability Testing: How to Plan, Design, and Conduct Effective Tests (Paperback),* John Wiley & Sons 5. Garrett, J. J. (2011). *The elements of user experience: User-centered design for the web and beyond* (2nd ed.). New Riders. 6. Cooper, A., Reimann, R., Cronin, D., & Noessel, C. (2014). *About face: The essentials of interaction design* (4th ed.). John Wiley & Sons. 7. Cooper, A. (1999). *The inmates are running the asylum: Why high-tech products drive us crazy and how to restore the sanity*. Sams. **Online Resources** 1. Interaction Design Foundation (2024). *User Experience (UX) Design Courses and Learning Paths*. Interaction Design Foundation, Denmark. 2. Nielsen Norman Group (2024). *UX Basics Study Guide*. Nielsen Norman Group, USA. 3. Google (2025). *Material Design 3: Design System and Product Design Guidelines*. Google LLC, USA. **Additional Resources** 1. *Acquired Podcast (2023). "How Nintendo Levelded Up". Ben Gilbert* 2. Stanley, P. (2025). UX patterns for AI designs. DesignUp Conference. 3. Beyond Users (2019). *Beyond Users Podcast: Interview with Alan Cooper*. Beyond Users.