

<b>COURSE TITLE</b>	<b>UI AND UX DESIGN</b>
<b>COURSE CODE</b>	<b>01CE0622</b>
<b>COURSE CREDITS</b>	<b>3</b>

**Objective:**

- 1 The objectives of UI/UX (User Interface/User Experience) design are centered around creating digital products and interfaces that are user-centered, effective, and engaging.

**Course Outcomes:** After completion of this course, student will be able to:

- 1 Evaluate user interfaces based on established UX/UI principles to determine their effectiveness, accessibility, and user satisfaction
- 2 Apply iterative user-centered design of graphical user interfaces
- 3 Apply the user Interfaces to different devices and requirements
- 4 Comprehensive understanding of principles and practices related to visual design and usability testing
- 5 Apply UX design concepts for real-life problems

**Pre-requisite of course:**NA

**Teaching and Examination Scheme**

<b>Theory Hours</b>	<b>Tutorial Hours</b>	<b>Practical Hours</b>	<b>ESE</b>	<b>IA</b>	<b>CSE</b>	<b>Viva</b>	<b>Term Work</b>
2	0	2	50	30	20	25	25

<b>Contents : Unit</b>	<b>Topics</b>	<b>Contact Hours</b>
1	<b>Introduction to the UI and UX</b> Introduction to UI and UX, The Relationship Between UI and UX,, Roles in UI/UX, Fundamental Principles of Interaction, The Design Challenge	3
2	<b>The Design Challenge</b> Defining the User Interface, The Importance and Benefits of Good Design, Characteristics of the Graphical User Interface,, Characteristics of a Web User Interfaces, General Principles of User Interface Design	5
3	<b>User Research and Information Architecture</b> UX Basics- Foundation of UX design, Good and poor design, Understanding Your Users, Product Objectives and User Needs, Interaction Design and Information Architecture	6
4	<b>Visual Design and Usability Testing</b> Visual Design Principles, Design Standards and Style Guides, Functional Layout, Interaction design, Introduction to the Interface, Navigation Design, Usability Testing: Purpose and Importance of Usability Testing, Scope of Testing, Prototypes, Kinds of Tests	8

<b>Contents : Unit</b>	<b>Topics</b>	<b>Contact Hours</b>
5	<b>Practical Aspects of UI Design</b> Empathy Mapping, Creating Personas, Creating Journey Map, Build Competitive Audits, Ideate Using Crazy-Eight Method, Create User Flows, Story Boarding	6
<b>Total Hours</b>		<b>28</b>

### Suggested List of Experiments:

<b>Contents : Unit</b>	<b>Topics</b>	<b>Contact Hours</b>
1	<b>Practical – 1</b> Explore and analyze popular websites/apps and identify UI/UX design elements	2
2	<b>Practical – 2</b> Installation of Figma on local machine and understanding the Figma software IDE	2
3	<b>Practical – 3</b> Design interactive prototypes for a mobile app using Figma Tool - Part 1	2
4	<b>Practical – 4</b> Design interactive prototypes for a mobile app using Figma Tool - Part 2	2
5	<b>Practical – 5</b> Design interactive prototypes for a mobile app using Figma Tool - Part 3	2
6	<b>Practical – 6</b> Portfolio Design - Part 1	2
7	<b>Practical – 7</b> Portfolio Design - Part 2	2
8	<b>Practical – 8</b> Portfolio Design - Part 3	2
9	<b>Practical – 9</b> Portfolio Design - Part 4	2
10	<b>Practical – 10</b> Portfolio Design - Part 5	2
11	<b>Practical – 11</b> Portfolio Design - Part 6	2
12	<b>Practical – 12</b> Portfolio Design - Part 7	2
13	<b>Practical – 13</b> Portfolio Design - Part 8	2
14	<b>Practical –14</b> Portfolio Design - Part 9	2
<b>Total Hours</b>		<b>28</b>

**Textbook :**

- 1 The Elements of User Experience: User-Centered Design for the Web and Beyond, Jesse James Garrett, Pearson Education, 2011

**References:**

- 1 The Essential Guide to User Interface Design: An Introduction to GUI Design Principles and Techniques, The Essential Guide to User Interface Design: An Introduction to GUI Design Principles and Techniques, The Essential Guide to User Interface Design: An Introduction to GUI Design Principles and Techniques, The Essential Guide to User Interface Design: An Introduction to GUI Design Principles and Techniques, Wilbert O. Galitz, Wiley, 2007
- 2 A Project Guide to UX Design: For user experience designers in the field or in the making, A Project Guide to UX Design: For user experience designers in the field or in the making, A Project Guide to UX Design: For user experience designers in the field or in the making, A Project Guide to UX Design: For user experience designers in the field or in the making, Russ Unger and Carolyn Chandler, New Riders Publishing, 2012
- 3 The UX Book Process and Guidelines for Ensuring a Quality User Experience, The UX Book Process and Guidelines for Ensuring a Quality User Experience, The UX Book Process and Guidelines for Ensuring a Quality User Experience, The UX Book Process and Guidelines for Ensuring a Quality User Experience, Rex Hartson, Pardha S. Pyla, Elsevier, Science, 2012

**Suggested Theory Distribution:**

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery					
Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
0.00	0.00	40.00	30.00	20.00	10.00

**Instructional Method:**

- 1 The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by black board, may also use any of tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.
- 2 The internal evaluation will be done on the basis of continuous evaluation of students in the laboratory and class-room.
- 3 Practical examination will be conducted at the end of semester for evaluation of performance of students in laboratory.
- 4 Students will use supplementary resources such as online videos, NPTEL videos, ecourses, Virtual Laboratory

**Supplementary Resources:**

- 1 <https://uiuxdesign.com/>
- 2 <https://www.uxdesigninstitute.com/>