

<b>COURSE TITLE</b>	<b>HUMAN COMPUTER INTERACTION</b>
<b>COURSE CODE</b>	<b>01CT0826</b>
<b>COURSE CREDITS</b>	<b>3</b>

**Objective:**

- 1 The Objective of this course is to give students an understanding of an interface and what role a designer plays in creating a user interface. They will learn how to design and articulate meaning using color, type, and imagery is essential to making interfaces function clearly and seamlessly. Students will build solutions for problems in society, understanding needs of the people, finding gaps in needs and existing technological solutions.

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

- 1 Understand the key formal elements of clear, consistent, and intuitive UI design.
- 2 Apply the learned skills to the design of a static screen-based interface.
- 3 Use the elements of UI/UX
- 4 Integrate the elements of UI/UX
- 5 Understand black-box and white-box testing, describing the benefits and use of both black-box and white-box testing.

**Pre-requisite of course:**Basic knowledge of OOP

**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>
3	0	0	50	30	20	25	25

<b>Contents : Unit</b>	<b>Topics</b>	<b>Contact Hours</b>
1	<b>Module</b> Introduction to Human Centered Design, Human Centered Design Process, Welcome to the UI/UX Design Specialization, Peer Review, Peer Review Tips, How to apply feedback, Required Tools, About CalArts and the Program in Graphic Design, Instructor Presence and Staff Support, Share stories and learn from user research, find themes and cluster them, User Interface The Relationship Between UI and UX , Roles in UI/UXA Brief Historical Overview of Interface Design, Interface Conventions: Theory Interface Conventions: Application Template vs Content Aesthetics & Functionality, Mapping, Testing, Envisioning Mapping Content Mapping Interaction Non-Visual Paper Prototyping Non-Visual User Testing Sitemap Look and Feel/Visual Research, Design Before Design, Look and Feel, Language as a design tool, Color and Shape, Imagery, Typography, Icons, Functionality, Speed and Style, Composition and Structure, Buttons, Not Buttons, States and Changes, Conventions and Expectations, Structure and Grids, Platforms and Screen Sizes.	42
<b>Total Hours</b>		<b>42</b>

**Textbook :**

- 1 Intelligent Human Computer Interaction: 11th International Conference, Uma Shanker Tiwary, SPINGER, 2020

**References:**

- 1 Human-Computer Interaction: An Empirical Research Perspective, Human-Computer Interaction: An Empirical Research Perspective, I. Scott MacKenzie, MK PUBLICATION, 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					
<b>Remember / Knowledge</b>	<b>Understand</b>	<b>Apply</b>	<b>Analyze</b>	<b>Evaluate</b>	<b>Higher order Thinking / Creative</b>
10.00	20.00	40.00	30.00		

**Instructional Method:**

- 1 Students may use supplementary resources such as online videos, NPTEL videos, e-courses, Virtual Laboratory, etc

**Supplementary Resources:**

- 1 MOOC Course, NPTEL, COURSERA, UdeMy, Infosys, Springboot, SWYAM etc. Online learning platform