

COURSE CODE	COURSE TITLE	L	T	P	C
1152CS108	USER INTERFACE DESIGN	3	0	0	3

**A. Preamble :**

The design of user interfaces for machines and software, such as computers, home appliances, mobile devices, and other electronic devices, with the focus on maximizing the user experience. The goal of user interface design is to make the user's interaction as simple and efficient as possible, in terms of accomplishing user goals (user-centered design).

**B. Prerequisite Courses:**

Sl. No	Course Code	Course Name
1	1150MA202	Engineering Mathematics I

**C. Related Courses:**

Sl. No	Course Code	Course Name
1	1151CS102	Data Structures
2	1151CS113	Computer Graphics and Image Processing

**D. Course Educational Objectives :**

Learners are exposed to

- Describe the web user Interface
- Describe the structure of user Interface and design process
- Organize the web systems and control

**E. Course Outcomes :**

Upon the successful completion of the course, students will be able to

CO No's	Course Outcomes	Knowledge Level (Based on revised Bloom's Taxonomy)
CO1	Describe the Characteristics of Graphics Interface and its Principles	K2
CO2	Design the standards and structures for Human computer interaction	K2
CO3	Understand the components of web systems and text boxes	K2
CO4	Demonstrate the Guidance of multimedia systems and its accessibility	K3
CO5	Summarize the concepts of windows layout and visualization	K2

**F. Correlation of Cos with Pos :**

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	M		M											L	
CO2	M	L	M	L											M
CO3	M	L	M	L				L							
CO4	M		M						L		L			L	M
CO5	H	L	M	L	L			L				L			

H- High; M-Medium; L-Low

**G. Course Content:**

**UNIT I INTRODUCTION**

8

Human-Computer Interface – Characteristics Of Graphics Interface –Direct Manipulation Graphical System – Web User Interface –Popularity –Characteristic & Principles.

**UNITII HUMAN COMPUTER INTERACTION**

10

User Interface Design Process – Obstacles –Usability –Human Characteristics In Design – Human Interaction Speed –Business Functions –Requirement Analysis – Direct – Indirect Methods – Basic Business Functions – Design Standards – System Timings – Human Consideration In Screen Design – Structures Of Menus – Functions Of Menus– Contents Of Menu– Formatting – Phrasing The Menu – Selecting Menu Choice– Navigating Menus– Graphical Menus.

**UNIT III WINDOWS**

9

Characteristics– Components– Presentation Styles– Types– Managements– Organizations– Operations– Web Systems– Device– Based Controls Characteristics– Screen – Based Controls – Operate Control – Text Boxes– Selection Control– Combination Control– Custom Control– Presentation Control.

**UNIT IV MULTIMEDIA**

9

Text For Web Pages – Effective Feedback– Guidance & Assistance– Internationalization– Accesssibility– Icons– Image– Multimedia – Coloring.

**UNIT V WINDOWS LAYOUT– TEST**

9

Prototypes – Kinds Of Tests – Retest – Information Search – Visualization – Hypermedia – WWW– Software Tools.

**TOTAL: 45 Hours****H. Learning Resources****i.Text Books:**

1. Wilbent. O. Galitz ,“The Essential Guide To User Interface Design”, John Wiley& Sons, 2001.
2. Ben Sheiderman, “Design The User Interface”, Pearson Education, 1998.

**ii.Reference Books:**

1. Alan Cooper, “The Essential Of User Interface Design”, Wiley – Dream Tech Ltd., 2002.

**iii. Online resources**

<http://www.annaunivedu.in/2012/08/it2024-user-interface-design-syllabus.html#ixzz3xlplel6R>