

IV YEAR SEM-II B.Tech CSE	ELECTIVE	L	T	P	C
Code: CS4605	Human Computer Interaction	2	2	0	4

UNIT-I: Introduction and Graphical User Interface

Importance of user Interface – definition, importance of good design. Benefits of good design. A brief history of Screen design.

The graphical user interface – popularity of graphics, the concept of direct manipulation, graphical system, Characteristics, Web user – Interface popularity, characteristics- Principles of user interface

UNIT-II: Design Process

Human interaction with computers, importance of human characteristics human consideration, Human interaction speeds, understanding business junctions.

UNIT-III: Screen Designing

Design goals – Screen planning and purpose, organizing screen elements, ordering of screen data and content – screen navigation and flow – Visually pleasing composition – amount of information – focus and emphasis – presentation information simply and meaningfully – information retrieval on web – statistical graphics – Technological consideration in interface design.

UNIT-IV: Windows

New and Navigation schemes selection of window, selection of devices based and screen based controls.

UNIT-V: Components

Text and messages, Icons and increases – Multimedia, colors, uses problems, choosing colors.

UNIT-VI: Software Tools and Interaction Devices

Specification methods, interface – Building Tools; Keyboard and function keys – pointing devices – speech recognition digitization and generation – image and video displays – drivers.

Text Books:

1. The essential guide to user interface design, Wilbert O Galitz, Wiley DreamaTech.
2. Designing the user interface. 3rd Edition Ben Shneidermann , Pearson Education Asia.

References:

1. Human – Computer Interaction. ALAN DIX, JANET FINCAY, GRE GORYD, ABOWD, RUSSELL BEALG, PEARSON.
2. Interaction Design PRECE, ROGERS, SHARPS. Wiley Dreamtech,
3. User Interface Design, Soren Lauesen , Pearson Education.

Online Content:

Title	Expert Name	Affiliation	Web link
HCI Course	Dr. Samit Bhattacharya Dept. of Computer Science and Engineering, IIT Guwahati	NPTEL	http://nptel.ac.in/courses/106103115