CO	PO						PSO		
	1	2	3	4	5	6	1	2	3
1.	√		√	√			√	√	√
2.	√		√				√	√	
3.	√		√	√			√	√	
4.	√		√	√			√	√	√
5.	√		√	√		√	√	√	√

CP5088 USER INTERFACE DESIGN L T P C
3 0 0 3

OBJECTIVES:

- To determine the necessity of user interaction by understanding usability engineering and user modeling.
- To learn the methodologies for designing interactive systems.
- To investigate the core and complex design issues for interaction.
- To examine the evaluation methodologies of design.
- To understand design issues for web and mobile platforms.

UNIT I INTRODUCTION 9

Context of Interaction –Ergonomics - Designing Interactive systems – Understanding Users-cognition and cognitive frame works, User Centred approaches - Usability, Universal Usability, Understanding and conceptualizing interaction, Guidelines, Principles and Theories

UNIT II INTERACTION DESIGN 9

Universal design principles, guidelines, heuristics, HCI Patterns, Design Frame Works, Design Methods, Prototyping, Understanding Interaction Styles, Direct Manipulation and Immersive Environments, Fluid Navigation, Expressive Human and Command Languages, Communication and Collaboration.

UNIT III DESIGN AND EVALUATION 9

Advancing the User Experience, Timely User Experience, Information Search, Data Visualization Evaluation Techniques- Assessing User Experience- Usability Testing – Heuristic Evaluation and Walkthroughs, Analytics Predictive Models.

UNIT IV MODELS AND THEORIES 9

Cognitive Models, Socio-Organizational Issues and Stake Holder Requirements, Communication And Collaboration Models task Analysis, Dialog Notations and Design, Models of the System, Modeling Rich Interaction, Ubiquitous Computing

UNIT V DESIGNING INTERACTIONS FOR WEB AND MOBILE PLATFORMS 9

Hypertext, Multimedia and WWW, Designing for the web Direct Selection, Contextual Tools, Overlays, Inlays and Virtual Pages, Process Flow. Use Transitions-Lookup patterns-Feedback Patterns, Mobile Apps, Mobile Navigation, Content and Control Idioms, Multi-Touch Gestures, Inter-App Integration, Mobile Web.

TOTAL : 45 PERIODS

OUTCOMES:

Upon completion of the course, the student will be able to

- Understand the basics of human computer interactions via usability engineering and cognitive modeling.
- Understand the basic design paradigms, complex interaction styles.
- Understand the fundamental design issues.
- Evaluate of interaction designs and implementations.
- Use models and theories for user interaction.
- Use above concepts for web and mobile applications.

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1.	√		√				√	√	
2.	√		√				√	√	
3.	√		√				√	√	
4.	√	√	√	√			√	√	
5.	√	√	√				√	√	
6.	√	√	√	√		√	√	√	√

SE5074 SOFTWARE RELIABILITY METRICS AND MODELS L T P C
3 0 0 3

OBJECTIVES:

- Learn different definitions of software quality.
- Know different notions of defects and classify them.
- Understand the basic techniques of data collection and how to apply them.
- Learn software metrics that define relevant metrics in a rigorous way.
- Gain confidence in ultra-high reliability.