VASIREDDYVENKATADRI INSTITUTE OF TECHNOLOGY				
AUTONOMOUS				
Nambur (V), Pedakakani (M), Guntur (Dt.),				
AndhraPradesh – 522 508				
Departmentof,CSE,ArtificialIntelligence&MachineLearning (CSM)				

	Nameof theCourse	L	T	P	C
III,YearII,Sem	**Digital Interaction Design**	3	0	0	3

UNIT-I

Introduction to Usability of Interactive Systems: Introduction, usability goals and measures, usability motivations, universal usability, goals for our profession Managing.
Guidelines, Principles, and Theories: Introduction to Guidelines, Principles and Theories.

UNIT-II

Design Processes: Introduction, Organizational Support for design, The Design Process, Design Framework, Design Methods, Design Tools, Practices and patterns, Social Impact Analysis, Legal Issues.
Direct Manipulation and Immersive Environments: Introduction ,Direct Manipulation, Examples of Direct Manipulation, 2-D and 3-D Interfaces, Teleportation and Presence, Augmented and Virtual Reality.

UNIT-III

Fluid Navigation: Introduction, Navigation by Selection, Small Displays, Content Organization, Audio Menus, Form Fill-in and Dialog Boxes.
Expressive Human and Command Languages: Introduction, Speech Recognition, Speech Production, Human Language Technology, Traditional Command Languages.

UNIT-IV

Devices: Introduction to Keyboards and Keypads, Pointing Devices, Displays.
Advancing the User Experience: Introduction , Display Design , View (Window) ,Management , Animation , Webpage Design , Color , Non-anthropomorphic Design , Error Messages.

UNIT-V

User Documentation and Online Help: Introduction, Online Vs Paper Documentation, Reading from paper Vs from Displays, Shaping the content of the Documentation, Accessing the Documentation, Online tutorials and animated documentation, Online communities for User Assistance, The Development Process.

Text Books:

1. Ben Shneiderman, Catherine Plaisant, Maxine Cohen, Steven Jacobs, Niklas Elmqvist Designing the User Interface: Strategies for Effective Human,Computer Interaction, Sixth Edition, Pearson Education, 2017.

Reference Books:

1. Preece, Rogers and Sharps, "Interaction Design", 3rd edition, Wiley Dreamtech, 2011.
2. The Essential guide to user interface design,2/e, Wilbert O Galitz, Wiley DreamaTech.
3. Human Computer, Interaction Dan R.Olsan, Cengage ,2010.
4. Jenny Preece, Helen Sharp, Yvonne Rogers, Interaction Design: Beyond Human Computer Interaction, Wiley, 5th Edition, 2019. (Experiments)

Micro Syllabus for Digital Interaction Design:

Unit-I: Introduction to Usability of Interactive Systems & Guidelines – Principles – Theories		
Unit	Module	Micro Content
Unit – I	**Usability of Interactive Systems**	1. Introduction
		2. usability goals and measure
		3. usability motivations
		4. universal usability
		5. goals for our profession Managing
	Guidelines – Principles – Theories	6. Introduction to Guidelines, Principles and Theories
Unit,II : Design Processes & Direct Manipulation and Immersive Environments		
Unit	Module	Micro Content
Unit,II	**Design Processes**	7. Introduction
		8. Organizational Support for design
		9. The Design Process, Design Framework
		10. Design Methods
		11. Design Tools
		12. Practices and patterns
		13. Social Impact Analysis
		14. Legal Issues
	Direct Manipulation and Immersive Environments	15. Introduction
		16. Direct Manipulation
		17. Examples of Direct Manipulation
		18. 2,D and 3,D Interfaces
		19. Teleportation and Presence
		20. Augmented and Virtual Reality

Unit-III : Fluid Navigation & Expressive Human and Command Languages		
Unit	Module	Micro Content
Unit-III	**Fluid Navigation**	21. Introduction
		22. Navigation by Selection
		23. Small Displays
		24. , Content Organization
		25. Audio Menus
		26. Form Fill-in
		27. Dialog Boxes
	Expressive Human and Command Languages	28. Introduction
		29. Speech Recognition
		30. Speech Production
		31. Human Language Technology
		32. Traditional Command Languages
Unit-IV: Devices & Advancing the User Experience		
Unit	Module	Micro Content
Unit –IV	**Devices**	33. Introduction to Keyboards and Keypads
		34. Pointing Devices
		35. Displays
	Advancing the User Experience	36. Introduction
		37. Display Design
		38. View (Window)
		39. Management – Animation
		40. Webpage Design
		41. Color
		42. Non-anthropomorphic Design
		43. Error Messages
Unit,V: User Documentation and Online Help		
Unit	Module	Micro Content
Unit-V	**User Documentation and Online Help**	44. Introduction
		45. Online Vs Paper Documentation
		46. Reading from paper Vs from Displays
		47. Shaping the content of the Documentation
		48. Accessing the Documentation
		49. Online tutorials and animated documentation
		50. Online communities for User Assistance
		51. The Development Process