

Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		L	T	P	L	T	P	Total
MCA44	User Experience Design	3	1	--	3	1	--	4
		Examination Scheme						
		ISE		MSE		ESE		
		10	30	100 (60% Weightage)				

Pre-requisite Course Codes	System Analysis & Design, Software Engineering and Project Management,UML
Course Outcomes	CO1 To understand HMI and UX design
	CO2 To explain UX design life cycle
	CO3 To analyze UX design process for users
	CO4 To analyze various parameters for design process.
	CO5 To evaluate UX design process
	CO6 To understand UX design for Agile development

Module No.	Unit No.	Topics	Ref.	Hrs.
1		Introduction to Human Machine Interaction	6,8	3
	1.1	Introduction		
	1.2	History of User interface designing		
	1.3	Usability		
	1.4	GUI & Web		
	1.5	User interface Design Goals		
2		Introduction to UX Design	1,2	6
	2.1	What is UX, Ubiquitous interaction		
	2.2	Emerging desire for usability.		
	2.3	From usability to user experience		
	2.4	Emotional impact as part of the user experience		
	2.5	User experience needs a business case		
	2.6	Roots of usability		
3		The UX Design- life cycle	1	6
	3.1	Introduction		
	3.2	A UX process lifecycle template		
	3.3	Choosing a process instance for your project		
	3.4	The system complexity space		
	3.5	Meet the user interface team		
	3.6	Scope of UX presence within the team		
4		The UX Design Process – Understand Users	1,3	7
	4.1	Introduction		
	4.2	The system concept statement		
	4.3	User work activity gathering		
	4.4	Abridged contextual inquiry process		

	4.5	Data-driven vs. model driven inquiry		
	4.6	History , Contextual Analysis		
	4.7	Extracting Interaction Design Requirements,		
	4.8	Constructing Design- Information Models.		
5		The UX Design Process-thinking, ideation and sketching	1,3	7
	5.1	Information		
	5.2	Architecture and Interaction Design and Prototyping Introduction		
	5.3	Design paradigms		
	5.4	Design thinking		
	5.5	Design perspective		
	5.6	User personas, Ideation, Sketching, More about phenomenology		
	5.7	Mental Models and Conceptual Design, Wireframes		
6		The UX Design Process-Evaluation	1,2	8
	6.1	UX Evaluation and Improve UX Goals, Metrics and Targets		
	6.2	UX Evaluation Techniques.- Formative vs Summative		
	6.3	types of formative and informal summative evaluation methods		
	6.4	types of evaluation data, some data collection technics		
	6.5	variations in formative evaluation results		
	6.6	informal summative data analysis		
	6.7	formative data analysis		
	6.8	feedback to process		
	6.9	evaluation report		
7		UX methods for Agile Development	4	5
	7.1	Introduction		
	7.2	Basics of agile SE method		
	7.3	drawbacks of agile SE method from the UX perspective		
	7.4	A synthesized approach to integrate UX		
			Total	42

References:

- [1] Rex Hartson and PardhaPyla ,”The UX Book”, MK Publication.
- [2] Jesmond Allen and James Chudley ,”Smashing UX Design”, John Wiley & Sons.
- [3] Russ Unger and Carolyn Chandler, “A Project Guide to UX Design”, O’reilly, Series Editor
- [4] Lindsay Ratcliffe and Marc McNeill , “Agile Experience Design”, Pearson.
- [5] William Lidwell, Kritina Holden and Jill Butler , “Universal Principles of Design”, Rosenfeild Media
- [6] Wilbert Galitz , “The Essential Guide to User Interface Design”, Second Edition, Wiley.
- [7] Alan Dix , “Human Computer Interaction”, New riders
- [8] Dr.Dhananjay Kalbande , Prashant Kanade, Sridari Iyer, “ Human Machine Interaction” , wiley.