

Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		L	T	P	L	T	P	Total
MCA5052	Multimedia Technology	4	-	--	4	-	--	4
		Examination Scheme						
		ISE		MSE		ESE		
		10		30		100 (60% Weightage)		

Pre-requisite Course Codes	Computer Graphics	
	CO1	Classify components of multimedia System usage with real time application.
	CO2	Analyze elements of multimedia.
	CO3	Evaluate coding techniques.
	CO4	Elaborate multimedia project using tool in planned cost & timeline.

Module No.	Unit No.	Topics	Ref.	Hrs.
1		Introduction to Multimedia:	1,2	6
	1.1	Definition and Scope of Multimedia, its Components & applications		
	1.2	Interactive Multimedia, Multimedia Growth, Multimedia Advantages & disadvantages		
	1.3	Major categories of Multimedia titles.		
	1.4	Multimedia Products, Kiosk		
	1.5	Multimedia in Public place, Multimedia on Web, Multimedia in business, Multimedia in mobile phones		
	1.6	iPod, Hypermedia and Hypertext, Hypermedia Applications		
2		Graphics & Text	2	7
	2.1	Graphics: Bitmap Graphics, Vector Graphics, Image file format GIF vs. JPEG		
	2.2	Graphics image sources, Graphics on internet, Graphic programs feature		
	2.3	Animation: Principals of animations, Animation types & technique, Applications of Animation		
	2.4	Morphing , Warping, Animation file and formats		
	2.5	Text: Text in multimedia Applications, General guidelines		
	2.6	Designing and use of text, working with text		
	2.7	Text fonts, Menus and Navigation, Font editing drawing tools		
3		Sound , Audio and Video :	2,3	7
	3.1	Multimedia system sounds, Sound, Sound file formats		
	3.2	MIDI, MIDI Messages, MIDI Vs Digital Audio		
	3.3	sound on Internet		

	3.4	Adding sound & video to your multimedia project, Analog display standards		
	3.5	Digital display standards, Digital video Basics		
	3.6	Video recording and tap formats, Video on internet,		
	3.7	Difference between computer, TV and Video, Optimizing video files for CD-ROM.		
4		Multimedia Authoring Tools	2, 5	5
	4.1	Making instance multimedia, Types of Authoring tools		
	4.2	Time based authoring tools, card and page based authoring tools Icon and object based authoring tools		
	4.3	Authoring Vs Presentation, Story boarding, Graphic design principle for PowerPoint		
	4.4	Development process for Multimedia Applications		
	4.5	Contents analysis for different applications.		
5		Designing and Producing:	2,5	6
	5.1	Designing, designing the structure of multimedia,		
	5.2	Different types of Multimedia structure, Hot spots, Buttons		
	5.3	User interface analysis & Design: Rules of user interface design		
	5.4	models of user interface design		
	5.5	User interface Analysis & Elements of user interface, User interface design, User interface evaluation & examples		
	5.6	Delivering: Testing, Preparing of delivery.		
6		Planning and costing	5	7
	6.1	The process of making multimedia & multimedia skills		
	6.2	multimedia skills team		
	6.3	Planning & costing: Project planning, scheduling & costing		
	6.4	Idea analysis, Idea management software		
	6.5	Pre testing, Task planning		
	6.6	Building a Team		
	6.7	Prototype, Multimedia project team roles		
	6.8	Development: Alpha Development, Beta Development		
7		Coding and Compression.	6	7
	7.1	Introduction to coding and compression techniques,		
	7.2	7 Hrs 66 Entropy encoding,		
	7.3	run length, Arithmetic encoding		
	7.4	Huffman, LempelZiv encoding		
	7.5	JPEG compression process, MPEG audio and video compression		
	7.6	Various CD Formats ,MPEG Standards		
			Total	45

References:

- [1] Ron Wodaski "Multimedia Madness", SAMS pub.
- [2] Tay Vaughan "Multimedia: Making it works", TMH pub
- [3] Rao "Multimedia Communication", Wiley -Dreamtech
- [4] S.K. Tripathi, S. V. Raghvan "Multimedia System"
- [5] P.K. AndleighKthakar "Mutimedia System Design", Prentice hail of India
- [6] J.E.K Budford "Multimedia System", Addision Wesley