



C.U.SHAH UNIVERSITY – Wadhwan City

FACULTY OF: Technology and Engineering (Diploma Engineering)

DEPARTMENT OF: Computer Engineering

SEMESTER: -VI **CODE:** - 2TE06MAT1

NAME – Multimedia and Animation Techniques

Teaching & Evaluation Scheme:-

Subject Code	Name of the Subject	Teaching Scheme				Evaluation Scheme							
		Th	Tu	Pr	Total	Theory				Practical (Marks)			Total
						Sessional Exam		University Exam		Internal		University	
						Marks	Hours	Marks	Hours	Pr/Viva	TW	Pr	
<u>2TE06MAT1</u>	Multimedia and Animation Techniques	04	00	04	08	30	1.5	70	03	-----	20	30	150

Objectives:- To introduce the different media used and the design issues in multimedia systems with understanding of multimedia programming. Provide an opportunity for students to apply design, implementation and evaluation concepts and techniques to the development of a realistic multimedia system.

Prerequisites: Basic knowledge of computer graphics and mathematics.

Course Outlines:-

Sr. No.	Course Contents	Hours
1	Multimedia Introduction to multimedia, Multimedia ,Hypertext, Hypermedia, Application of Multimedia in various fields, Education, Media, Home, Marketing etc, Storage medium, Representation medium, Transmission medium, Independent media, Combination of media, Integration, data characteristics, Transmission types i.e. asynchronous, synchronous	08
2	Sound / Audio ,Video & Animation Basic concept of sound, Computer Representation of sound, Audio formats, MIDI concept, WAVE,MP3 ,MP4, Concept of Images, Image types – captured images and stored images, Image formats - .JPEG,.BMP ,.GIF, Concept of Video, Video formats, Concept of Animation, Computer based animations	12

3	Data Compression Techniques Storage requirements for Audio/ Video, Data compression techniques, Run Length, Arithmetic, Huffman, JPEG standard (Image encoding), MPEG standard (Audio/Video encoding)	12
4	Flash Introduction: Creating Animation in Flash: Introduction to Flash Animation – Introduction to Flash – Working with the Timeline and Frame-based Animation - Working with the Timeline and Tween-based Animation – Understanding Layers – Action script.	08
5	Flash Animation: Motion Caption, Formats, Methods, Usages, Expression, Motion Capture Software's, Script Animation Usage, Different Language of Script Animation Among the Software.	08
6	Flash Audio and Video: Concept Development, Story Developing –Audio & Video, Color Model –Device Independent Color Model, Gamma and Gamma Correction, Production Budgets, 3D Animated Movies.	08

List of Experiments:-

- To study about the computer representation of Audio.
- To study about the Audio\ Video file formats.
- To study about the Image file formats.
- To study about the data compression techniques.
- Develop Animation movie using flash.

Learning Outcomes:-

- Develop Animation.
- Data Compression Technique.

Books Recommended:-

- Multimedia Parekh- TMH.
- Multimedia Computing and Applications Ralf Steinmetz (Pearson).
- Multimedia and Computer Graphics D.P.Mukharjee.
- Flash 8 for Dummies by Ellen.

E- References:-

- <http://www.teacherclick.com/flash8/index.htm>.