

M.Com (E-Comm.) Semester-IV
407 : Multimedia Systems

Objectives -:

1. To learn the concept of multimedia system, multimedia documents.
2. To learn the different multimedia software tools, storage technologies and image file formats.

Chapter No.	Name of Topic	No. of Lectures	Ref. Books
1	Introduction to Multimedia 1.1 What is multimedia? 1.2 History of Multimedia systems 1.3 Components of Multimedia Systems 1.4 Applications of Multimedia System	6	Book 1
2	Multimedia Application Development 2.1 Introduction 2.2 Story, flowline and script 2.3 Storyboard 2.4 Guidelines 2.4.1 Guidelines for Visual Elements 2.4.2 Guidelines for Animation 2.4.3 Guidelines for Text 2.4.4 Guidelines for Audio 2.5 Overview of multimedia Software tools 2.5.1 Digital Audio 2.5.2 Music sequencing notations 2.5.3 Image/Graphics editing 2.5.4 Animation	7	Book 1,2
3	Multimedia Documents 3.1 Document and document Architecture 3.2 Designing a Multimedia Interchange format 3.3 Standard Generalized Markup Language(SGML) 3.4 Multimedia and Hypermedia Information coding Expert Group(MHEG) 3.5 Open Media Framework(OMF)	5	Book 1,2
4	Storage Technology 4.1Magnetic Media 4.1.1 Hard Disk 4.1.2 RAID 4.2 Optical Media 4.2.1 CD Storage 4.2.2 CD standards 4.3 DVD 4.3.1 Sizes and Capacity of DVD 4.3.2 DVD Video 4.3.4 DVD audio	8	Book 1
5	Audio 5.1 Basics of Digital Audio 5.1.1 What is Sound? 5.1.2 Characteristics of Sound 5.2 Synthesizers	9	Book 1,3

	5.2.1 Types of Synthesizers 5.2.2 Characteristics of Synthesizers 5.3 Introduction to MIDI 5.3.1 What is MIDI 5.3.2 Components of MIDI 5.3.3 MIDI Messages 5.4 Sound Card 5.4.1 Basic Components 5.4.2 Processing Audio Files - Wav files - MIDI files		
6	Image/Graphics 6.1 Introduction: /Bit/pixel 6.2 Format of images 6.3 Color Models 6.4 Basic steps for Image Processing 6.5 Image Processing software 6.6 Graphics/ Image Data Structure 6.6.1 8-bit color image 6.6.2 24-bit color image 6.7 Standard System Independent Formats 6.7.1 GIF 6.7.2 TIFF 6.7.3 JPEG 6.8 System Dependent Formats 6.8.1 Microsoft Windows : BMP 6.8.2 Macintosh : PAINT and PICT	10	Book 2,3
Total		45	

References:

1. Principles of Multimedia by Ranjan Parekh
2. Multimedia : Computing, Communications and Applications – Rolf Steinmetz and Klara Nahrstedt
3. Multimedia Systems Design – Prabhat K. Andleigh and Kiran Thakrar