

Year & Sem:	Course Code: EC3608	Course Name: Multimedia Technology	No. of Credits: 4	L 2	T&PS 2	P 0
Unit-I: Introduction to Multimedia System: Architecture and components, Multimedia distributed processing model, Synchronization, Orchestration and Quality of Service (QOS) architecture. Unit-II: Audio and Speech: Data acquisition, Sampling and Quantization, Human Speech production mechanism, Digital model of speech production, Analysis and synthesis, Psycho-acoustics, low bit rate speech compression, MPEG audio compression. Unit-III: Images and Video: Image acquisition and representation, Composite video signal NTSC, PAL and SECAM video standards, Bilevel Image Compression standards: ITU (formerly CCITT) Group III and IV standards, JPEC image compression standards, MPEG video compression standards. Unit-IV: Multimedia Communication: Fundamentals of data communication and networking, Bandwidth requirements of different media, Real time constraints: Audio latency, Video data rate, multimedia over LAN and WAN, Multimedia conferencing. Unit-V: Hypermedia presentation: Authoring and Publishing, Linear and non-linear presentation, Structuring Information, Different approaches of authoring hypermedia documents, Hypermedia data models and standards. Unit-VI: Multimedia Information Systems: Operating system support for continuous media applications: limitations of usual OS, New OS support, Media stream protocol, file system support for continuous media, data models for multimedia and hypermedia information, content based retrieval of unstructured data. References/Text Books: 1. 2. Lecture Plan: Unit-I & -II syllabus for MID-I, Unit-III & -IV syllabus for MID-II and Unit-V & -VI syllabus for MID-III examinations. Video Lectures (Web Links): 1. 2. Study Materials (Web Links): 1. 2. Problems & Solutions (Web Links):						