

## LESSON PLAN

Program Name	Computer Engineering
Course Title	Multimedia Applications
Course Code	ITOE304
Semester	6th
Course Teacher Name	NISHANT SHARMA

### Evaluation Scheme

Sr. No.	Subject Code	Subject	Study Scheme			Total Study Hours	Credits	Evaluation Scheme					Total Marks			
			Th	Pr	DCS			Internal Assessment			External Assessment					
								Th	Pr	Total	Th	Hrs		Pr	Hrs	Total
1	ITOE304	Multimedia Applications	3	-	1	4	3	40	-	40	60	3	-	-	60	100

### References Books/ Study Material

1. Elements of Multimedia by Sreeparna Banerjee, CRC Press
2. Fundamentals of Multimedia by Ze-Nian Li et al., Springer
3. Multimedia Foundations by Vic Costello, Routledge Publication
4. Online Tutorials on Adobe Photoshop and Illustrator

### Course Outcomes (Cos)

CO-1	Understand the basic terminology associated with multimedia technologies.
CO-2	Explain various applications of multimedia technology
CO-3	Understand the basic multimedia compression techniques

### Teaching Plan

Unit No	No. of Lect. Planned	Topic to be covered	Proposed date (as per time table)	Actual Date	Remarks
1	1	Multimedia, Multimedia Elements	27/01/2026		
	2	Multimedia Hardware - GPU	29/01/2026		
	3	Digital Camera, Scanner, Projector	30/01/2026		
	4	Printer, MIDI Synthesizer	03/02/2026		
	5	Light Pen, Touch Screen	05/02/2026		
	6	Microphone, Speakers	06/02/2026		
	7	Multimedia Software - Raster Graphics and Vector Graphics Editing Software	10/02/2026		
	8	Audio and Video Editing Software	12/02/2026		
	9	Multimedia Authoring	13/02/2026		
	10	Video and Audio Data Compression Techniques	17/02/2026		
	11	Lossy and Lossless	19/02/2026		
2	13	Video on Demand	20/02/2026		
	14	Video Streaming	24/02/2026		
	15	Multimedia Conferencing	26/02/2026		
	16	Interactive Television	27/02/2026		
	17	Educational Applications	03/03/2026		
	18	Social Media, Healthcare	05/03/2026		
	19	Augmented Reality, Virtual Reality	06/03/2026		

3	20	Visual Effects (VFX)	10/03/2026		
	21	Modelling and Simulation	12/03/2026		
	22	Marketing, Business Presentations	13/03/2026		
	24	Raster and Vector Graphics	17/03/2026		
	25	Basic Terminology - Coordinate System	19/03/2026		
	26	Pixel, Bitmap	20/03/2026		
	27	Resolution, Dot Pitch	24/03/2026		
	28	Color Depth, Aspect Ratio	27/03/2026		
	29	Gamut, Color Models-RGB, CMYK	31/03/2026		
	30	Aliasing, 2D Transformations - Translation	02/04/2026		
	32	Shapes, Anchor Points	07/04/2026		
	32	Bezier Curves	09/04/2026		
	33	Combining Shapes - Union, Intersection, Exclusion and Minus;	10/04/2026		
	34	Stroke and Fill, Features of Adobe Illustrator	16/04/2026		
	35	Features of Adobe Photoshop and Adobe Illustrator	17/04/2026		
4	41	Characteristics of Audio - Frequency, Amplitude	23/04/2026		
	42	Envelope; Digitization of Sound	24/04/2026		
	43	Sampling and Quantization	28/04/2026		
	44	Synthetic Sound, MIDI	30/04/2026		
	45	Digital Video	05/05/2026		
	46	Basic Principles of Animation	07/05/2026		
	47	Animation Terminology - Timeline Frames	08/04/2026		
	48	Keyframes, Layers	12/04/2026		
	49	Tweening, 2D and 3D Animation	14/05/2026		
	50	-----Do-----	15/04/2026		
	51	Introduction to different MPEG standards - MPEG-1	19/04/2026		
	52	MPEG-2	21/04/2026		
	53	MP3	22/04/2026		
63	AAC	26/04/2026			

### Home Assignments

Ass. No	Contents of Syllabus Covered	Proposed date	Actual Date	Remarks
1	Unit-1&2	24.02.2026		
2	Unit-3&4	25.03.2026		

### Class /House Test

Name of Test	Syllabus Covered in Tests (Unit/Chapter Wise)	Proposed date	Actual Date	Remarks
Class Test-I	Unit-1&2	As per HPTSB Academic Calendar Schedule		
Class Test-II	Unit-3& 4			
House Test	80% of whole syllabus			

Signature of Course Teacher with Name

*(Signature)*  
27/10/26  
*(Veishat Shama)*

Approved by

*(Signature)*  
OIC/HOD/Principal