



Type of course: Compulsory

Prerequisite: NA

Rationale: Animation is required to create action oriented phenomena in applications that can be hosted on website. Animation plays a huge role in entertainment (providing action and realism) in advertising, films and gaming industry and also be extremely effective in education (providing visualization and demonstrations of abstract ideas and concepts). Adobe flash is an important and popular tool that is used to design such application suitable for web. In this course student will learn to use adobe flash to develop two dimensional animations. Developing animation requires fair knowledge about the graphics. Thus course also introduces basics of graphics using Photoshop. The students of this course will be able to design multimedia and animated rich content that can be hosted on the web.

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks						Total Marks
L	T	P		Theory Marks			Practical Marks			
			ESE (E)	PA (M)		PA(V)		PA (I)		
	PA	ALA		ESE	OEP					
03	00	00	03	50	00	00	00	00	00	50

L- Lectures; P- Practical; OJT- On Job Training; C- Credit; ESE- End Semester Examination; PA- Progressive Assessment

Contents:

Sr. No.	Practical / Hands on Exercise	Teaching Hrs.	Module Wightage
1	<p>UNIT -I Introduction To Multimedia, Needs and Areas of use, Identifying Multimedia Elements -Text, Images, Sound, Animation and Video, Making Simple Multimedia With PowerPoint.</p> <p>TEXT -Concepts of Plain & Formatted Text, RTF & HTML Texts, Using Common Text Preparation Tools, Conversion to and from of Various Text Formats, Creating text using standard software.</p>	8	20
2	<p>UNIT-II SOUND -Sound and its Attributes, Sound and Its Effects in Multimedia, Frequency, Sound Depth, Channels and its Effects on Quality and Storage, Size Estimation of Space of a Sound File, Sound Card Standard –FM Synthesis Cards, Waves Table Cards, MIDI and MP3 Files and Devices, 3D Sounds, Recording and editing sound using sound editors like Audacity, Sound forge etc.</p>	8	20
3	<p>UNIT-III IMAGES -Importance of Images Graphics in Multimedia, Vector and Raster Graphics, Regular Graphics vs. Interlaced Graphics, Image Capturing Methods -Scanner, Digital Camera Etc. Color models-RGB, CYMK, Hue, Saturation, and Brightness, Various Attributes of Images Size, Color, Depth Etc,</p>	10	20

**GUJARAT TECHNOLOGICAL UNIVERSITY****Syllabus for Bachelor of Vocation (B.Voc), 2nd Semester****Branch: Software Development****Subject Name: Multimedia Tools & Applications****Subject Code: 1120204****With effective
from academic
year 2018-19**

	Various Image File Format BMP, DIB, CIF, PIC, and TIF Format Their Features And Limitations, Image format conversion, various effects on images. Create images using Photoshop, CorelDraw and apply various effects, Using Layers, Channels and Masks in images.		
4	UNIT-IV VIDEO-Basic of Video, Analog and Digital Video Type of Video, Digitization of Analog Video, Video Standard –NTSC, Pal, HDTV, Video Capturing Media /Instruments Videodisk Camcorder Compression Techniques, File Formats AVI, MJPG, MPEG, Video Editing and Movie Making Tools, converting formats of videos, recording and editing videos using video editing software like adobe premiere or Sony Vegas.	8	20
5	UNIT-V ANIMATION-Concepts of animation, 2D and 3D animation, tools for creating animation, character and text animation, creating simple animation using GIF animator and flash, Morphing and Applications. Authoring tools for Multimedia –Introduction to various types of multimedia authoring tools, CD/DVD based and web based tools, features and limitations, creating multimedia package using all components.	8	20
	Total	42	

Reference Books:

1. Multimedia & Its Applications, V.K. Jain, Khanna Publishing House
2. Fundamentals of Multimedia, Ramesh Bangia, Khanna Publishing House
3. Introduction to Multimedia System, Sugata Mitra Gaurav Bhatnagar
4. Photoshop CC: The missing manual Lesa Snider O'Reilly
5. Adobe Photoshop CS5 -one-to-one Deke MCClelland O'Reilly Media
6. Flash CS6/CS5/CS4 in Simple Steps Kogent Learning Solution Inc. Wiley
7. Action Script for Flash MX: The Definitive Guide 2nd Edition Colin Mook O'Reilly Media

Course Outcomes:

Sr. No.	CO Statement	Marks % Weightage
CO-1	Understand the basics of multimedia	20
CO-2	Understand the concept of sound with various applications	20
CO-3	Understand the concept of images with various applications	20
CO-4	Understand the concept of video with various applications	20
CO-5	Develop animation using action script of flash	20

Laboratory work: NA**List of Open Source Software/learning website:**

Students must refer to following sites to enhance their learning ability.

- 1) <http://www.codecademy.com/learn>
- 2) <http://www.webdevelopersnotes.com/tutorials/flash/>