



Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058-India
(Autonomous Institute Affiliated to University of Mumbai)

Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		L	T	P	L	T	P	Total
TEITL501	Computer Graphics And Virtual Reality Lab	--	--	2	--	--	1	1
		Examination Scheme						
		ISE			ESE			Total
					Practical		Oral	
		40	10		10		60	

Pre-requisite Course Codes	TEITC501 (Computer Graphics And Virtual Reality)		
After successful completion of the course, student will be able to:			
	CO1	Construct display primitives: line and circle.	
	CO2	Represent two and three-dimensional objects.	
	CO3	Demonstrate clip portion that are not of immediate interest.	
	CO4	Create Animation movie and objects using Java 3D	

Exp. No.	Experiment Details	Ref.	Marks
1	Write a menu driven program to draw (dashed, thick, normal) Line using DDA line drawing algorithm and Bresenham's line drawing algorithm	1,2	5
2	Write a program to draw concentric circles using midpoint circle algorithm. Let each circle be of different color. Also add delay.	1,2	5
3	Write a program to Fill an object using Flood Fill and Region filling Algorithm.	1,2	5
4	Write a menu driven program to perform 2D translation, scaling and reflection, shearing on a Object. Color the transformed object.	1,2	5
5	Write a program to Clip a line using Cohen-Sutherland Line clipping algorithm.	1,2	5
6	Write a program to Clip a polygon using Sutherland-Hodgeman polygon clipping algorithm.	1,2	5
7	To create an animated movie by adding button event using macromedia flash.	2	5
8	To create object using Java 3D.	2	5
Total Marks			40

References:

1. Donald Hearn and M. Pauline Baker, "Computer Graphics", Pearson Education.
2. R. K Maurya, "Computer Graphics with Virtual Reality", Wiley India.