

### Lesson Plan

**Name of Faculty** : Prachi, Assistant Professor of CSE  
**Discipline** : Computer Science and Engineering  
**Semester** : 7<sup>th</sup> (odd)  
**Subject** : computer graphics lab  
**Lesson Plan Duration** : 15 weeks ( sept-dec 2024)

Week	Theory/ Practical (Group-I/ II)		Topic Covered Date and Remarks		
	Practical Day	Topics/ Programs	Date	HOD	Director-Principal
1 <sup>st</sup>	1	Write a program to draw a line using DDA algorithm.			
2 <sup>nd</sup>	2	Write a program to draw a line using Bresenham's algorithm for lines with slopes (a) negative and less than 1 (b) positive and less than 1. (c) positive and greater than 1. (d) negative and greater than 1.			
3 <sup>rd</sup>	3	A program to draw a circle using Bresenham's circle Algorithm.			
4 <sup>th</sup>	4	A program to draw a circle using Midpoint circle Algorithm.			
5 <sup>th</sup>	5	A program to draw an ellipse using Midpoint Ellipse Algorithm.			
6 <sup>th</sup>	6	A program to fill different types of geometric shapes using Flood Fill. Algorithm			
7 <sup>th</sup>		<b>Minor test 1<sup>st</sup></b>			
8 <sup>th</sup>	7	A program to fill different types of geometric shapes using Boundary fill algo. A program to demonstrate window to view-port mapping.			
9 <sup>th</sup>	8	A program to clip a line segment using 4-bit code, algorithm.			
10 <sup>th</sup>	9	A program to draw a C-Curve of nth order A program that shows a scene of flying kite.			
11 <sup>th</sup>	10	A program to rotate a line about its mid-point.			
12 <sup>th</sup>	11	A program that shows a scene of eclipse.			
13 <sup>th</sup>	12	A program that translate and rotate a circle along a horizontal line.			
14 <sup>th</sup>		<b>Minor test 2<sup>nd</sup></b>			
15 <sup>th</sup>	13	A program to rotate an ellipse about its major axis and minor axis alternatively.			

