

Department Of Computer Science

Teaching Plan

Discipline : **Computer Science (Honours)**
Semester : **Six**
Paper Code : **CC14T**
Subject : **Computer Graphics**
Name of the faculty : **Soumya Chakraborty**
Duration: 21st February,2023 to 10th June,2023

Unit	Topics	No of Lectures	Duration in Hours
Unit 1	Introduction: Basic elements of Computer graphics, Applications of Computer Graphics.	4	4
Unit 2	Graphics Hardware: Architecture of Raster and Random scan display devices, input/output devices.	6	6
Unit 3	Fundamental Techniques in Graphics: Raster scan line, circle and ellipse drawing, thick primitives, Polygon filling, line and polygon clipping algorithms, 2D and 3D Geometric Transformations, 2D and 3D Viewing Transformations (Projections- Parallel and Perspective), Vanishing points.	16	16
Unit 4	Geometric Modeling: Representing curves & Surfaces.	6	6
Unit 5	Visible Surface determination: Hidden surface elimination.	6	6
Unit 6	Surface rendering: Illumination and shading models. Basic color models and Computer Animation.	6	6

Reference Book:

1. Computer Graphics by D. Hearn, M. Baker, Prentice Hall of India, 2008.