CS 513

ADVANCED COMPUTER GRAPHICS

UNIT-I


UNIT-II

Fundamentals of 3-D graphics: Projections - Parallel projection and perspective projection, 3-DTransformations, Bezier curves and B-spline curves.

Visible-Surface Detection Methods - Painter's algorithm and Z-buffer method

UNIT-III


Morphing, Simulating Accelerations, Motion Specification, Direct Motion Specification, Goal Directed Systems, Kinematics and Dynamics.

UNIT -IV


UNIT-V

Advanced Raster Graphics Architecture:

Display - Processor Systems Standard Graphics Pipeline, Introduction to multiprocessing,
Pipelin Front-End Architectures,
Parallel Front-End Architectures. Multiprocessor Rasterization Architectures, Image-Parallel Rasterization, Object-Parallel Rasterization, Hybrid-Parallel Rasterization, Enhanced Display Capabilities.

**Suggested Reading:**


Addision- Wesley, 1996.