Approval: 1st Convocation adhoc Meeting

Course Name: Computer Graphics
Course Code: CS 350
Credit: 3-0-0-3
Category:
Prerequisites:

Course contents:

Raster Graphics; line and circle drawing algorithms; Windowing and 2D/3D clipping. Cohen and Sutherland line clipping, Cyrus Beck clipping method; 2D and 3D Geometrical Transformations: scaling, translation, rotation, reflection; Viewing Transformations: parallel and perspective projection; Curves and Surfaces: cubic splines, Bezier curves, B-splines, Parametric surfaces. Surface of revolution Sweep surfaces, Fractal curves and surfaces; Hidden line/surface removal methods; illuminations model; shading, Introduction to Ray-tracing; Animation; Programming practices with standard graphics libraries like openGL.

Text and Reference Books

1. Interactive Computer Graphics: A top-down approach using OpenGL by Edward Angel,

   Pearson Education, fifth edition

2. Computer Graphics using OpenGL by Hearn and Baker, Pearson Education, 3rd edition

3. Computer Graphics: Principles and Practice: Second Edition in C by Foley, Dam, Feiner and

   Hughes, Pearson Education

4. Computer Graphics using OpenGL by Hill, Eastern Economy Edition, PHI