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| **Sl. No** | **Syllabus** | **Curriculum** | **Deployment Strategy and****Tool** | **Cross-cutting issues****integrated** | **PO, PSO and CO** | **Attainment Verification** |
| 1. | Computer Graphics Laboratory and Mini Project | 1. Understand basics of computer graphics, different graphics devices and application of computer graphics.Use various scan conversion and object filling algorithms and their comparative analysis.2. Use geometric transformations on graphics objects and their application in composite form.3.Extract scene with different clipping methods and its transformation to graphics display devices.4.Explore projections and visible surface detection technique for display of 3D scene on 2D scree | 1. Chalk and

Talk method1. PPT
 | * Business

 Ethics* Human

 values | PO1:Engineering KnowledgePO2:Problem AnalysisPO3:Design/Development Of SolutionsPO4:Conduct Investigations Of Complex ProblemsPO5:Modern Tool UsagePO9:INDIVIDUAL AND TEAM WORKPO10:COMMUNICATION |  |
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|  |  | PSO1:Professional SkillsPSO2:Problem Solving Skill |
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|  |  | CO1:Understand suitable hardware and software to develop graphic packages using OpenGL and implement algorithm for 2D graphics using primitives and attributes.CO2:Apply concepts of polygon fill area functions for 2D geometric primitives and Implement OpenGL geometric transformation functions for 2D objects.CO3:Apply concepts of line clipping algorithm and illuminations models for 2D geometric primitives and Implement OpenGL geometric transformation functions for 3D objects.CO4:Comprehend projection transformation matrices for 2D and 3D viewing and Apply visible surface detection methods using OpenGL functions.CO5:Implement menu driven interactive programs using OpenGL functions and Explain corresponding OpenGL functions for curves and surfaces. |
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