DSGN 341 3D Computer Graphics

This course introduces 3-D modelling and rendering software, modelling concepts and techniques, methods on how to create materials, characters, scenes rendered with digital lights and cameras, and providing a perspective on the 3-D digital design and virtual environments.

(Pre-requisites: DSGN 244)

Course Learning Outcomes:

By the end of the course, students will be able to:

1. Demonstrate basic knowledge of different 3D computer graphic principles and techniques, in an artistic method.
2. Utilize core concepts of 3D computer graphics, including viewing, projection, perspective, modelling and transformation in two and three dimensions
3. Able to analyse and communicate multimedia design projects in a professional manner.
4. Learn how to model, texturize, light, and render 3D graphics by using design software.

Textbook & Course Materials:

- N/A

Course Content:

1. Introduction to 3D computer Graphics
2. Modelling Objects
3. Render Setup and Lighting
4. Coloring Models
5. Short 3D short film research
6. Modelling basic assets
7. Node base modelling
8. Modelling advance assets
9. Advance shading & Lighting
10. Character animation basics
11. Cyclic animation
12. Scene editing & Animation