

MTD201 Fundamentals of Graphics Design

Level: 2

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JAN

Synopsis:

This course introduces students both the theoretical and practical aspects of 3D modeling using the Open Source software Blender. The course is lab-based and students will have ample opportunity to learn graphics design through hands-on practice. At the end of the course, students will possess the fundamental skills in using Blender to design graphics.

Topics:

- Introduction to 3D Graphics and 3D Principles
- Blender Interface and Shortcuts
- Modelling Concepts
- Mesh Tools
- Techniques for duplicating objects
- Boolean, combining and separating, clone/array
- Curves and Bezier Curves
- Materials
- Mapping
- Blender Lights
- Three point lighting
- Animation in Blender

Textbooks:

Jason Van Gumster: Blender for Dummies (eTextbook) 3rd Edition, Wiley Wiley
ISBN-13: 9781119047131

Learning Outcome:

- Describe the use of Blender shaders & Material Editor
- Discuss and apply the basics of lighting
- Apply the concept of Animation in a 3D application
- Employ basic materials and apply to objects
- Appraise 3D objects to create a still scene
- Illustrate transformations and cloning of objects

Assessment Strategies (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PRE-CLASS QUIZ 1	2
	PRE-CLASS QUIZ 2	2
	PRE-CLASS QUIZ 3	2
	TUTOR-MARKED ASSIGNMENT 1	15
	QUIZ 1	9
Overall Examinable Components	ECA	70
Total		100