MTD311 Interactive Digital Animation

Level: 3

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JAN

Synopsis:

MTD311 reviews the fundamental principles of interactive computer graphics through 3D modelling, special 3D effects and animation. This course is intended to expose students to the craft of creating basic animation using relevant tools through proper understanding of interactive computer graphics and processes, actual hands-on practice, and completion of assignments in the course.

Topics:

- Overview of 3D computer graphics
- Blender 3D software
- Fundamentals of Animation in Blender
- 2D and 3D maps
- Colours for Realism
- Creating cartoon effects using materials
- Importance of lighting in a scene
- Use of cameras in a 3D scene
- Factors affecting rendering speed
- Keyframe technique
- Importance of Hierarchives
- Blender animation tools

Textbooks:

Habgood, J., Overmars, M.: The Game Maker's Apprentice Apress
ISBN-13: 9781590596159

D. Roland Hess: SBU1: Blender Foundations: The Essential Guide to Learning Blender 2.6 (ebook) (old e-ISBN: 9781136130380) Focal Press (Taylor & Francis)
ISBN-13: 9781136130373

Learning Outcome:

- Apply the elements of 3D modeling to interactive computer graphic designs
- Employ the principles of light, camera and materials in animation
- Compare the differences between 2D and 3D modeling
- Prepare a project plan for the creation of an interactive digital animation scheme
- Design a 3D animation production using the software provide in the course
- Create animation special effects using the software provided in the course

Assessment Strategies (Evening Class):

Components	**Description**	**Weightage Allocation (%)**
Overall Continuous Assessment	LAB REPORT 1	15
	TUTOR-MARKED ASSIGNMENT 1	15
Overall Examinable Components	ECA	70
Total		**100**