

MTD315 Computer Interactive Graphics

Level: 3

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JAN

Synopsis:

This course provides a basic background on geometry and computer graphics for virtual reality systems.

Topics:

- Introduction to Graphics Systems and Models
- Basic OpenGL
- Simple programs in 2D and 3D
- Three Dimensional Graphics
- Geometry and transformations
- Implementation
- Polygon fill
- Discrete methods
- Bitmaps and pixel maps
- Compositing and transparency
- Modelling
- Tree structured models

Textbooks:

Edward Angel, Dave Shreiner: Interactive Computer Graphics a top-down approach with WebGL (ebook) 7th Pearson
ISBN-13: 9781292019338

Learning Outcome:

- Illustrate elements of computer graphics
- Employ the elements of computer graphics in 2D applications
- Appraise elements of computer graphics for 3D use
- Analyze computer coding
- Assemble elements of design into a visual presentation
- Draw from different libraries to generate 3D computer graphics images with interaction

Assessment Strategies (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	QUIZ 1	15
	TUTOR-MARKED ASSIGNMENT 1	15
Overall Examinable Components	Written Exam	70
Total		100