

Liverpool John Moores University

Title: Visualising Digital Design
Status: Definitive
Code: **5099ENG** (117188)
Version Start Date: 01-08-2016

Owning School/Faculty: Electronics and Electrical Engineering
Teaching School/Faculty: Electronics and Electrical Engineering

Team	Leader
Fang Guo	Y

Academic Level: FHEQ5
Credit Value: 12
Total Delivered Hours: 48
Total Learning Hours: 120
Private Study: 72

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	24
Practical	24

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Test	AS1		40	
Portfolio	AS2		60	

Aims

This module aims to provide students with knowledge and skills required to produce high quality presentation visuals using existing CAD data and modern software tools.

Learning Outcomes

After completing the module the student should be able to:

- 1 Import and Export data between an industry standard CAD package and a 3rd party visualisation package
- 2 Understand how to compose a scene and configure lighting and cameras.
- 3 Apply appropriate materials and textures to objects and render a scene
- 4 Apply appropriate post-processing techniques in order to prepare still image visualisations for publication or client review

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Test	1	2	3
Portfolio	4		

Outline Syllabus

3D Software – Commercial and open source software for modelling and rendering 3D scenes. Import and export filetypes and associated requirements.

3D Scene Creation – Composition of scenes in 3D modelling packages. Creating an environment. Position of lighting and cameras. Application of materials and textures.

Production Workflow – Steps required to take CAD data from SolidWorks and to render still images and animated clips using popular packages. Generation of web based and multimedia contents.

Learning Activities

Practical sessions supported by weekly tutorials

Notes

This module gives design students experience in how to develop their designs into high quality visualisations using industry standard techniques and software.