

Liverpool John Moores University

Title: CGI AND SPECIAL EFFECTS
Status: Definitive
Code: **5087ENG** (117051)
Version Start Date: 01-08-2016

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

Team	Leader
Paul Otterson	Y

Academic Level: FHEQ5 **Credit Value:** 24 **Total Delivered Hours:** 72
Total Learning Hours: 240 **Private Study:** 168

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Practical	60
Tutorial	12

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Technology	Tech		100	

Aims

To provide the student with a competency in a state of the art software animation/effect package. To develop techniques for video editing and post production

Learning Outcomes

After completing the module the student should be able to:

- 1 Use 3D software for rendering special effects
- 2 Appreciate the tasks involved in animation and video post production
- 3 Compose animations within CGI package and export to use in NLE software
- 4 Create realistic environments using atmosphere and texture effects

Learning Outcomes of Assessments

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

Technology	1	2	3	4
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Outline Syllabus

3D software environment and control.

Introduce the fundamentals of 3-D graphics and workspaces, explaining co-ordinates, axis, lines, vertex, meshes, and polygons. Design using modeling, working with splines; 3-D primitives; compound objects; object parameters.

Animation using software. Use of environment effects, e.g. fog, underwater Lighting effects, types of light e.g. spot, directional. Camera properties, lens, focal length.

Rendering and video post production. Advanced Effects, explosions, and shadows. Web streaming configuration. Live video web streaming.

Learning Activities

Theory and method of application will be delivered through tutorials and demonstrations. The practical application will be conducted through the use of software and the mini-project assessment based on a computer generated animation.

Notes

This module builds on the use of 3D models to apply animated effects. The module aims to develop competency in applying various 3D computer modeling and animation techniques, and integration with video editing and post-production systems. It requires the use and access to high end computer resources