

Liverpool John Moores University

Title: CGI and Special Effects
Status: Definitive
Code: **5209AMP** (124849)
Version Start Date: 01-08-2021

Owning School/Faculty: Engineering
Teaching School/Faculty: Engineering

Team	Leader
Karl Jones	Y

Academic Level: FHEQ5 **Credit Value:** 20 **Total Delivered Hours:** 44
Total Learning Hours: 200 **Private Study:** 156

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	11
Practical	33

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	AS1	A portfolio of CGI related material (such as models, videos etc)	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:

CGI related material	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 coordinates, 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

Lectures, Practical sessions and demonstrations.

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 modelling and animation techniques, and integration with video editing and post-production systems. It requires the use and access to high end computer resources