

## CGI and Special Effects

### Module Information

2022.01, Approved

#### Summary Information

Module Code	5209AMP
Formal Module Title	CGI and Special Effects
Owning School	Engineering
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 5
Grading Schema	40

#### Teaching Responsibility

LJMU Schools involved in Delivery
Engineering

#### Learning Methods

Learning Method Type	Hours
Lecture	11
Practical	33

#### Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-CTY	CTY	January	12 Weeks

#### Aims and Outcomes

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
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**After completing the module the student should be able to:**

## Learning Outcomes

Code	Number	Description
MLO1	1	Use 3D software for rendering special effects
MLO2	2	Appreciate the tasks involved in animation and video post production
MLO3	3	Compose animations within CGI package and export to use in NLE software
MLO4	4	Create realistic environments using atmosphere and texture effects

## Module Content

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 modelling, 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.
Module Overview	
Additional Information	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

## Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Portfolio	CGI related material	100	0	MLO1, MLO2, MLO3, MLO4

## Module Contacts

### Module Leader

Contact Name	Applies to all offerings	Offerings
Karl Jones	Yes	N/A

### Partner Module Team

Contact Name	Applies to all offerings	Offerings
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