

Script Programming and Technical Animation

Module Code:	GAV5001-B
Academic Year:	2018-19
Credit Rating:	20
School:	Department of Media Design and Technology
Subject Area:	Games, Animation and Visual Effects
FHEQ Level:	FHEQ Level 5
Module Leader:	Dr Tao Wan

Additional Tutors:

Pre-requisites:

Co-requisites:

Contact Hours

Type	Hours
Lectures	18
Tutorials	12
Laboratory	24
Directed Study	143
Examinations DO NOT USE	3

Availability Periods

Occurrence	Location/Period
NLA	Namal College / Semester 2 (Feb - May)
BDA	University of Bradford / Semester 1 (Sep - Jan)

Module Aims

To learn the fundamentals and the concepts and of 3D embedded scripting language to students with basically no programming experience before; to learn technical animation methods with Mel and Expressions; to understand the methods and the concepts for basic modelling and animation tools development in order to complete modelling and or

animation tasks practically; to gain understanding of real-time/procedure 3D modelling and animations technology theory and practice with an animation tool.

Outline Syllabus

Fundamentals of script programming, programming essentials, data and variables, function and procedures, loops, control statements, embedded programming environment, understanding the concepts and process of scripting 3D animation, the basics of embedded script commands, modelling in 3D environments, using expressions, nodes, user interface, handling applications.

Module Learning Outcomes

On successful completion of this module, students will be able to...

- 1 understand the fundamentals of script programming and programming essentials; understand the process of computer animation technical concepts and implementation with respect to commercial 3D graphics packages; be able to select appropriate methods to produce a technical animation.
- 2 develop a scripting program and produce an animation by means of a 3D embedded language; develop a customised solution for modelling and animation tasks.
- 3 Work to a specification within a prescribed timescale; to a set brief

Learning, Teaching and Assessment Strategy

Teaching method will be lectures and demos; tutorials and practical sessions, and individual coursework project developments. This module covers the fundamentals and concepts of an embedded scripting language, with lectures and demos that introduce the relevant theory and key concepts followed by lab sessions to provide hands-on experience and reinforce the theory learnt. Assessment is based on practical individual course work project to demonstrate the skills developed and to demonstrate the knowledge and understanding of technical animation and scripting programming, as well as their theory and methods. Supplementary assessment: students will be required to repair deficiency in the relevant failed area of the module as original assessments

Mode of Assessment

Type	Method	Description	Length	Weighting	Final Assess'
Summative	Coursework	Coursework 1: Coursework project product and Lab work tasks		70%	No
Summative	Coursework	Coursework 2: Coursework	-1500 words	30%	Yes

report (min 1500
words)

Legacy Code (if applicable)

EM-0216D

Reading List

To view Reading List, please go to [rebus:list](#).