Module Details

Module Title	Script Programming and Technical Animation
Module Code	GAV5001-B
Academic Year	2024/5
Credits	20
School	School of Built Environment, Architecture & Creative Industries
FHEQ Level	FHEQ Level 5

Contact Hours

Type	Hours
Lectures	24
Online Tutorials (Synchronous)	12
Laboratories	12
Directed Study	152

Availability

Occurrence	Location / Period
BDA	University of Bradford / Semester 1

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.

Learning Outcomes

Outcome Number	Description
O1	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.
O2	Develop a scripting program and produce an animation by means of a 3D embedded language; develop a customised solution for modelling and animation tasks.
O3	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 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	Weighting
Summative	Coursework - Artefact	Coursework 1: Coursework Game Project	60%
Summative	Coursework - Artefact	Coursework 2: Lab Work Tasks	40%

Reading List

To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html

Please note:
This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.