

Module specification

When printed this becomes an uncontrolled document. Please access the Module Directory for the most up to date version by clicking on the following link: [Module directory](#)

Module Code	GME608
Module Title	Advanced Character Production and Animation
Level	6
Credit value	20
Faculty	FACE
HECoS Code	100363
Cost Code	GAGM
Pre-requisite module	N/A

Programmes in which module to be offered

Programme title	Core/Optional/Standalone
BA (Hons) Game Art and Animation	Core

Breakdown of module hours

Learning and teaching hours	24 hrs
Placement tutor support hours	0 hrs
Supervised learning hours e.g. practical classes, workshops	0 hrs
Project supervision hours	0 hrs
Active learning and teaching hours total	24 hrs
Placement hours	0 hrs
Guided independent study hours	176 hrs
Module duration (Total hours)	200 hrs

Module aims

This module aims to do the following:

- Evaluate graduate-level expectancy in relation to game characters in the contemporary game industry.
- Combine all previous experience with character production and animation and culminate it in an industry-capable portfolio piece
- Demonstrate effective use and knowledge of character geometry, materials, rigging and animation.
- Produce an advanced character showreel that demonstrates a high-quality and viable game character in a real-time, game engine environment.

Module Learning Outcomes

At the end of this module, students will be able to:

1	Critically evaluate industry standard practice for a high-quality character asset and animation workflow to identify efficient strategies for practice.
2	Synthesise a high-quality 3D game character asset to a specific development benchmark that demonstrates clear artistic intent.
3	Construct a sound rigging solution that demonstrates appropriate potential implementation into a game world.
4	Create a set of custom animations that demonstrate clear relation to gameplay and storytelling.
5	Integrate a fully realised 3D game character into a real-time game engine scenario and showcase content to a graduate-level standard.

Assessment

Indicative Assessment Tasks:

This section outlines the type of assessment task the student will be expected to complete as part of the module. More details will be made available in the relevant academic year module handbook.

This assessment demonstrates a full production process for a game character based on a particular benchmark/character budget. Indicatively, this could be done with a contemporary theme or specific concept, and students will be required to plan and produce a set of work on

this basis. Students will be required to take an industry-capable approach to modelling, rigging and animation for characters with a particular focus on mapping the work to key game product outcomes (though this does not need to represent the work being part of a full game product). Finally, students will demonstrate their work as part of an in-engine portfolio piece that demonstrates graduate-level quality.

Assessment number	Learning Outcomes to be met	Type of assessment	Duration/Word Count	Weighting (%)	Alternative assessment, if applicable
1	1, 2, 3, 4, 5	Portfolio	N/A	100%	N/A

Derogations

None

Learning and Teaching Strategies

The primary skill base of this module will be delivered through a series of lectures, demonstrations and practical work that will equip the students with the technical skills and confidence to produce advanced character production and animation specialisation. Content will be available for students to access synchronously and asynchronously and may indicatively include first and third-party tutorials and videos, supporting files, online activities any additional content that supports their learning.

As this module progresses, experiential and peer learning strategies will be encouraged as the students' progress with their coursework. Class time will shift to more student-led portfolio development time to focus of formative feedback for individual student achievement.

Welsh Elements

Students will have the right to submit assessed work in Welsh, to receive academic supervision and access learning resources and correspondence in Welsh. Students are encouraged to engage with Welsh cultural themes, creative elements and enterprising opportunities as part of student-led activities and assignments to facilitate wider contextual awareness and distinctive creative outputs.

Indicative Syllabus Outline

Indicative Syllabus includes the following topic areas:

- 3D Character Animation Pipeline
- Facial Animation Techniques
- Development Benchmarks & Budgets
- Efficient & Flexible Rigging Strategies
- Hierarchies, Constraints & Deformation
- Weight Painting Tools & Techniques
- Motion Capture Opportunities

- Physics Driven Animation
- Performance Capture
- Animation Showreel Production

Indicative Bibliography

Please note the essential reads and other indicative reading are subject to annual review and update.

Essential Reads:

Bjellvåg, T. (2027), *3D Game Animation with Unreal Engine 5: Uncover Real-Time Animation Techniques for Modern Games and Interactive Experiences*, Birmingham: Packt Publishing.

Other indicative reading:

Li, J., Watkins, A., Arevalo, K., Tovar, M. (2021), *Creating Games with Unity, Substance Painter, & Maya: Models, Textures, Animation, & Code*, Boca Raton: CRC Press.

O’Hailey, T. (2024), *Rig it Right! Maya Animation Rigging Concepts*, Boca Raton: CRC Press.

Osipa, J. (2010), *Stop Staring: Facial Modeling and Animation Done Right*, Indianapolis: Wiley Publishing.

Administrative Information

For office use only	
Initial approval date	July 2026
With effect from date	September 2027
Date and details of revision	
Version number	1