



Unit Title	How Games Are Made
FHEQ Level	Level 4
Unit Code	GMD20102
Credit Value	15 Credits
Unit Type	Subject

Learning Hours			
Staff – Student Contact Hours		Independent Study Hours	
Classes	45	Independent Study	50
Supervised access to resources	0	Preparation for Assessment	20
		Unsupervised Access to Resources	35
Total			150

Unit Description

This unit covers an introduction to the primary games technologies that you will use on the course. It will cover their usage, the context within the industry in terms of roles and how they integrate into an effective pipeline for games production.

This unit will develop student's skills using core games development technologies, such as games engines, 3D build and texturing packages and scripting languages used within games engines.

This unit will assess students current skill set and provide appropriate targets for them to hit over the term. Students will create a blog detailing their progress with regular check-ins with technical and academic staff.

The unit will encourage students to experiment with tools, push their understanding of them and to enable students to make an informed choice with regards to pathway selection at the end of the year.

The Five Principles underpin the Mindsets and Skillsets Manifesto and are the foundation upon which all course curriculum frameworks and unit specifications are based. The relevant Principles as stated below have been mapped against the Learning Outcomes relevant to each course unit and at each level (see Programme Specifications for full description of the Five Principles):

1. Cultivate / Where the individual thrives.
2. Collaborate / Where disciplines combine and evolve.
3. Integrate / Where education engages industry.
4. Advocate / Where purpose meets practice.
5. Originate / Where enquiry informs creativity.

Unit Indicative Content

Development of core technical skills including:

- Engine Technology
- Visual Scripting
- Scripting
- Asset creation
- Texturing
- Digital Sculpting

- Rigging for animation
- Understand how these technologies are deployed within the industry by completing online activities and challenges.
- Online courses at various levels of competence.
- Reflection in a portfolio or blog.

Unit Aims

Within the context of the Honours Degree credit framework, the aims of the course are to:

- Enable the acquisition and development of technical skills for best in class development tools.
- Enable a culture of self-efficacy with regards to technical proficiency.
- Establish collaborative culture for learning within the cohort.
- Create a learning community made of academics, industry, students and technical staff.
- Promote a deeper understanding of the key game making technologies used in the industry and encourage students to engage with them.
- Promote diversity, inclusivity, ethical, social and environmental awareness and provide opportunities for study and progression to all students.

The curriculum design and units will *“facilitate acquisition of appropriate knowledge and understanding, development of the necessary personal attributes, and application of the skills which equip and prepare students for continuing personal development and professional practice.”* (Subject Benchmark Statements, 2017).

Unit Learning Outcomes (Items in bold are the main focus within each LO for the unit)

LO1 Cultivate

- **Technical Competence**
- **Subject Knowledge**
- Resilience

Demonstrate capacity for developing discipline specific knowledge and technical competencies, supporting academic & practical self-efficacy and emerging employability abilities.

LO4 Advocate

- **Critical Reflection**
- Professional Identity

Demonstrate capacity for Critical Reflection, to consider and support personal and professional development.

Demonstrate emerging working approach/attitude that identifies consideration of social and ethically responsible working methods and how this informs personal practice.

Learning and Teaching Methods

Learning will be developed through: lectures, practical demonstrations, and online courses provided by 3rd parties. It will also feature seminars, tutorials, master classes, critical self and peer appraisal and collaborative working.

Where appropriate external guest speakers will further support delivery on the unit. Students will also need

to undertake self-directed independent study to support learning.

The following methods play a significant role in learning and teaching on the course:

- Aligned Workshops, Lectures and Seminar sessions support the core teaching delivery.
- Research led projects are used to embed an understanding of research and research methods from the beginning to ensure students develop the skill to explore the contexts and conditions of their practice.
- Reflective journals are used throughout the course to promote the development of autonomous, confident and critically reflective, self-directed learners.
- Self-evaluative writing is used to enable students to take responsibility for their own learning by identifying needs and prioritising and planning their learning.
- Self-assessment encourages students to take responsibility for monitoring and making judgments about aspects of their own learning.
- Peer assessment is used to promote assessment as part of learning. .

Assessment methods and tasks

Brief description of assessment methods

- *Formative Assessment: You will be given the opportunity for formative feedback/feedforward. This will be given midway through the unit or at an appropriate time.*
- *Summative assessment: Is the completion of the main unit tasks – typically a finished outcome together with associated research and reflective elements and the completion of a digital workbook and accompanying treatments or presentations.*
- *Presentations to peers are usually within a small group environment where at least two tutors are present.*
- *Playable builds should be self-contained and not the editor project files unless stated by the brief*
- *In some cases digital files will be required to assess technical skill.*
- *You will be notified of your grades within 3 weeks of the hand in date and feedback is usually via an audio file in which at least two tutors contribute to feedback and feedforward.*

Assessment tasks	Weighting (%) (one grade or multi-grade unit)
Self-Reflective Blog / Portfolio	100%

Indicative Assessment Criteria

Assessment criteria are the basis on which the judgment of the adequacy of the work is made. A more detailed assessment criteria will be specified in the brief.

- **The ability to reflect on current level of skill and select an appropriate course of study to improve. (LO4)**
- **Demonstrate that self-directed learning in key development technologies. (LO4, LO1)**
- **Demonstrate increasing technical proficiency in key development areas. (LO1)**
- **Show collaborative effort to improve. (LO4)**
- **Demonstrate understanding how the games industry uses key technologies (LO4)**

Essential Reading list

- Bay, J (2017) Start Your Video Game Career: Proven Advice on Jobs, Education, Interviews, and More for Starting and Succeeding in the Video Game Industry. Game Industry Career Guide.
- Bond, J.G (2020). Introduction to Game Design, Prototyping, and Development (Third Edition). Addison Wesley
- Schell, J (3ed, 2019). The Art of Games Design: A Book Of Lenses. CRC Press
- Dawson, M. Beginning C++ Through Game Programming. Cengage Learning.
- Ferrone, H. Learning C# by Developing Games with Unity 2019: Code in C# and build 3D games with Unity. Packt Publishing.

Detailed further reading and online resources will be provided in the brief and through the unit via AULA