

Module specification

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Module Code	GME302
Module Title	Game Design Fundamentals
Level	3
Credit value	20
Faculty	FACE
HECoS Code	101019
Cost Code	GAGM

Programmes in which module to be offered

Programme title	Is the module core or option for this programme
STEM Foundation Year	Option

Pre-requisites

None

Breakdown of module hours

Learning and teaching hours	40 hrs
Placement tutor support	0 hrs
Supervised learning e.g. practical classes, workshops	0 hrs
Project supervision (level 6 projects and dissertation modules only)	0 hrs
Total active learning and teaching hours	40 hrs
Placement / work based learning	0 hrs
Guided independent study	160 hrs
Module duration (total hours)	200 hrs

For office use only	
Initial approval date	4 Sept 2024
With effect from date	Sept 2024
Date and details of revision	
Version number	1

Module aims

This module is designed to introduce fundamental concepts of game design, development, game art and contemporary industry studies. Using a series of unique coursework challenges, this module will be to provide a training platform for students wishing to continue studies at undergraduate level.

The coursework challenges will cover a host of key topics and empower students to engage with the multidisciplinary nature of the industry and understand the importance of reflective practice along with the development of key design and technical skills. A key outcome of the module will be the nurturing of a proactive attitude and a willingness to engage with and discuss relevant concepts within the context of creating games.

Module Learning Outcomes - at the end of this module, students will be able to:

1	Identify the differences in development practice for creating games
2	Apply industry relevant tools to develop game design concepts
3	Demonstrate game design ideas through contextualised portfolio work

Assessment

Indicative Assessment Tasks:

Students will be required to demonstrate their knowledge of fundamental game design, development skills and industry practices by completing a series of small coursework challenges. Each coursework challenge will run for a set period of time (for example 2-4 weeks) and will focus on a particular topic area. Some challenges may build on previous ones or provide the opportunity for students to develop small project pieces that build on/extend/augment work carried out in other modules on the programme.

Overall, the module coursework will be broken down into 2-4 challenges based upon both foundation and contemporary techniques in game development, design and game art. Final grades will be derived from the number of successfully completed coursework challenges and their respective cumulative marks.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)
1	1, 2, 3	Portfolio	100%

Derogations

N/A

Learning and Teaching Strategies

In line with the Active Learning Framework, this module will be blended digitally with both a VLE and online community. 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, the strategies will change to best support a diverse learning environment. Initially, the module will start with a heavier reliance on engaging tutor-led lectures, demonstrations, and workshops to ensure that the students get the relevant threshold concepts. As the module continues experiential and peer learning strategies will be encouraged as the students' progress with their coursework. Sessions will shift to more tutorial-based sessions to focus of formative feedback for individual student achievement.

Learning and teaching strategies may differ between relevant coursework scenarios. Where possible this module will be delivered by multiple staff members to demonstrate the array of design skills covered. Each coursework piece will have didactic elements to cover the coursework range and tutorial time.

Indicative Syllabus Outline

Syllabus includes topic areas that include:

- Games Industry Fundamentals
- 3D modelling & digital sculpting fundamentals
- Game design fundamentals (digital and non-digital)
- User experience (UX) Design
- Texturing
- Introduction to Game Engines
- Programming concepts
- Software & Industry Tools
- Methodologies & Industry Practice

Indicative Bibliography:

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

Essential Reads

Murdock, K. (2022), *Autodesk Maya 2023 Basics Guide*, Kansas: SDC Publications.

Other indicative reading

Salmond, M & Ambrose. G (2013), *Fundamentals of Interactive Design*: AVA Publishing

Keller, E. (2013), *Maya Visual Effects the Innovator's Guide*: Autodesk Official Press.

Ingrassia, M. (2009), *Maya for games modelling and texturing techniques with Maya and Mudbox*, Focal Press/Elsevier, Amsterdam; Boston.

Schreier, J. (2017), *Blood, Sweat, and Pixels: The Triumphant, Turbulent Stories Behind How Video Games Are Made*. Harper Paperbacks.