

Module Code:	COM458
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Module Title:	Game Design & Interaction
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Level:	4	Credit Value:	20
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Cost Centre(s):	GACP	<u>JACS3</u> code:	I620
		<u>HECoS</u> code:	101268

Faculty:	Arts, Science and Technology	Module Leader:	Richard Hebblewhite
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Scheduled learning and teaching hours	36 hrs
Guided independent study	164 hrs
Placement	0 hrs
Module duration (total hours)	200 hrs

Programme(s) in which to be offered (not including exit awards)	Core	Option
BSc (Hons) Computer Game Development	✓	<input type="checkbox"/>
BSc (Hons) Computer Game Design and Enterprise	✓	<input type="checkbox"/>
BSc (Hons) Computer Game Development (with Industrial Placement)	✓	<input type="checkbox"/>
BSc (Hons) Computer Game Design and Enterprise (with Industrial Placement)	✓	<input type="checkbox"/>
BA (Hons) Game Art	✓	<input type="checkbox"/>

Pre-requisites
N/A

Office use only

Initial approval: 28/11/2018

Version no:1

With effect from: 01/09/2019

Date and details of revision: 12/04/19 APSC approved change to module title and programme list to include BA (Hons) Game Art

Version no:2

Module Aims

This module aims to introduce practical experience in working with industry standard game and media development environments as part of a small professional team. Students will develop an awareness of the agile management processes required in small size games and media projects, as well as a practical application of the media production cycle.

The module will also develop an appreciation the key technical elements of real time game engine technology and their practical implications, along with an introduction to the fundamentals of game design and its impact on technology.

Intended Learning Outcomes

Key skills for employability

- KS1 Written, oral and media communication skills
- KS2 Leadership, team working and networking skills
- KS3 Opportunity, creativity and problem solving skills
- KS4 Information technology skills and digital literacy
- KS5 Information management skills
- KS6 Research skills
- KS7 Intercultural and sustainability skills
- KS8 Career management skills
- KS9 Learning to learn (managing personal and professional development, self-management)
- KS10 Numeracy

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

Key Skills

At the end of this module, students will be able to		Key Skills	
1	Manage and implement a small scale game or media project.	KS2	KS3
2	Demonstrate an understanding of the fundamental principles and practices related to game design and the impact of design decisions within a development project..	KS6	KS1
3	Engage with industry standard development environments and tools in the development of a small game or media project	KS10	KS5
		KS4	

Transferable skills and other attributes

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Derogations

N/A

Assessment:

Indicative Assessment Tasks:

The first assignment will ask students to develop a case study based on a modern game title where the focus will be on the analysis of game design choices and impact on player experience and sales performance. Some consideration for game mechanics, difficulty and challenge and general fitness for purpose should be given.

The second assignment will focus on the development of a prototype game application as part of a small team. The students will work to professional procedures and production methodology standards. The project will incorporate design documentation, technical documentation and art style guidelines.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)	Duration (if exam)	Word count (or equivalent if appropriate)
1	1,3	Coursework	50		2000
2	2,1	Group Project	50		2000

Learning and Teaching Strategies:

The primary skill base of this module will be delivered through a series of lectures, demonstrations and studio workshops which will equip the students with the practical means to develop small scale games and media products.

The primary teaching will revolve around the development of a central game product in small teams. This product will then be readied for deployment on the Android, Apple or Steam platforms. The students will be expected to develop an appreciation for the use of such hardware (such as tablets and smart phones) as well as underpin their development process with a recognized methodology such as SCRUM.

Students will also research best modern industry practice in relation to the design and deployment of popular products.

Syllabus outline:

Syllabus includes topic areas that include:

Agile development methodologies – SCRUM (overview)

Team based development.

Effective brainstorming, rapid application design and conceptualization.

Media production cycle.

Research, design and planning.

Game and media design principles.

Testing and quality assurance.

Development cycle and testing for smart phones and tablets.

Game engine architecture and rendering.

Industry standard development environments and tools such as: - Fusion Developer, Unreal Engine 4, JIRA & Agile Management

Indicative Bibliography:

Essential reading

Macklin, C. (2016) *Games, Design and Play: A Detailed Approach to Iterative Game Design*. Addison-Wesley Professional.

Other indicative reading

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

Schell, J. (2014) *The Art of Game Design: A Book of Lenses*. A K Peters/CRC Press.

Nixon, D. (2017) *Unreal Engine 4 for Beginners*. Luquinox

Useful Resources:

<http://www.GamaSutra.com>

<http://www.gamesindustry.biz>