

Module code: MOD007705	Version: 1 Date Amended: 03/Jul/2020
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1. Module Title

Games Data, Analytics and Research

2a. Module Leader

lan Brown

2b. School

Cambridge School of the Creative Industries

2c. Faculty

Faculty of Arts, Humanities, Education and Social Sciences

3a. Level

7

3b. Module Type

Standard (fine graded)

a. Credits	
)	

4b. Study Hours	
300	

5. Restrictions				
Туре	Module Code	Module Name	Condition	
Pre-requisites:	None			
Co-requisites:	None			
Exclusions:	None			
Courses to which this module is restricted:	MSc Computer Games Development (Computing)			

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6a. Module Description

Games and gamers create data. By analysing what players do in a game you can accurately learn how many people are playing your game, what the favourite camping spots or weapons are, or what drives more sales in your in-game shop.

You will learn how in this module.

You'll learn how to gather the data you need, safely and ethically through a commercial analytics provider, including integration with an industry standard game engine.

Next, find out how to process and evaluate that data, and identify errors and noise.

You will discover the types and sources of bias in data collection and processing, whether intentional or unconscious, as well as approaches to spot and avoid them. As a significant amount of player feedback is obtained through questionnaires and surveys, the pitfalls and good practice of writing them will be a key part of this.

Once you have good data, you will learn to use scientific research methods on the collected information as well as strategies for comparing the differences in behaviour caused by an updated user interface or other change in game design.

TLDR; How to get and process the evidence to make the decisions your games need to flourish.

6b. Outline Content

This module will cover topics related to the gathering, processing and understanding of data in games and similar software for business and research purposes, such as:

- · Cloud Back End as a Service (BAAS) data collection
- Data Visualisation
- The Scientific Method
- Bias
- Research Ethics
- Data Collection Laws
- Monetisation and Metrics
- A/B Testing
- How to use an example service
- Survey Design
- Presentation and Interview Techniques

6c. Key Texts/Literature

The reading list to support this module is available at: https://readinglists.aru.ac.uk/

6d. Specialist Learning Resources

Students will have access to a specialist game development lab, with the latest industry standard game development tools. The students will also have access to a variety of hardware to supplement their studies. Students will have access to an LMS where online discussions, support and document access will be provided. Access to the Library search services will also be an important resource.

7. Learning Outcomes (threshold standards)			
No.	Туре	On successful completion of this module the student will be expected to be able to:	
1	Knowledge and Understanding	Analyse and critically evaluate potential tools and techniques required in the development of game products.	
2	Knowledge and Understanding	Critically evaluate complex issues from a variety of viewpoints and rigorously apply appropriate methodologies, techniques and practical strategies; being sensitive to the context.	
3	Knowledge and Understanding	Identify and apply legal and ethical requirements to research and software development with a global world view.	
4	Intellectual, practical, affective and transferrable skills	Devise an effective and practical research proposal for a research project, game service or monetisation strategy.	
5	Intellectual, practical, affective and transferrable skills	Design and develop a game product with data collection to a professional standard, using appropriate and up-to-date technologies and techniques.	
6	Intellectual, practical, affective and transferrable skills	Present, promote and defend their work in a live setting in a professional manner	

8a. Module Occurrence to which this MDF Refers				
Year	Occurrence	Period	Location	Mode of Delivery
2025/6	ZZF	Template For Face To Face Learning Delivery		Face to Face

8b. Learning Activities for the above Module Occurrence				
Learning Activities	Hours	Learning Outcomes	Details of Duration, frequency and other comments	
Lectures	0	N/A	N/A	
Other teacher managed learning	36	1-6	3 hours of practical per week for 12 weeks.	
Student managed learning	264	1-6	Self-directed study.	
TOTAL:	300			

9. Assessment for the above Module Occurrence					
Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
010	Coursework	1-6	100 (%)	Fine Grade	40 (%)
6000 word equivalent case study and supporting artefact(s) and presentation(s)					

In order to pass this module, students are required to achieve an overall mark of 40% (for modules at levels 3, 4, 5 and 6) or 50% (for modules at level 7*).

In addition, students are required to:

(a) achieve the qualifying mark for each element of fine graded assessment as specified above (b) pass any pass/fail elements

[* the pass mark of 50% applies for all module occurrences from the academic year 2024/25 – see Section 3a of this MDF to check the level of the module and Section 8a of this MDF to check the academic year]