

# GAME: Game Analytics

Language of Instructive:       6         FrG Level:       8         Module Delivered International Control of Control C	Module Title:			Game Analytics			
NFQ Levei:       8         Module Delivered In       1 programme(s)         Teaching & Learning Strategies:       The module uses Problem Based Learning (PBL). The students are initially given an induction into this way of learning. Subsequently, they are given a number of team problems to solve. Each student has the opportunity to play different roles within their team. The problems are tackled in a studio environment with supervision and gludance provided by the module tutors. At the end of the cycle, the students present their findings to the tutors and their peers. The students also tackle an individual problem that incorporates all elements from the team problems, along with some new challenges.         Module Alm:       The module teaches state of the art tools and processes to make data-informed decisions in a team-based environment that iteratively improve the game feel, quality and performance of game systems.         Learning Outcomes       The module teaches state of the art tools and processes to make data-informed decisions in a team-based environment that iteratively improve the game feel, quality and performance of game systems.         LO1       Work in teams to design a gameplay experiment by stating a hypothesis and selecting appropriate metrics to track in real time.         LO2       Analyse experimental results to make data-informed decisions.         LO3       Identify, track, and resolve issues arising from the analysis of a game system relating to game feel and software quality.         Pre-requisite learning for a practical skill) that is recommended before enrolment in this module.       No incompatible modules listed         Incompatible Modules	Language of Instruction:		n:	English			
Module Delivered In       1 programme(s)         Teaching & Learning       The module uses Problem Based Learning (PBL). The students are initially given an induction into this way of learning. Subsequently, they are given a number of team problems to solve. Each student has the opportunity to play different roles within their team. The problems are tackled in a studie on information and guidance provided by the module tutors. At the end of the cycle, the students present their findings to the tutors and their peers. The students also tackle an individual problem that incorporates all elements from the team problems, along with some new challenges.         Module Aim:       The module teaches state of the art tools and processes to make data-informed decisions in a team-based environment that iteratively improve the game feel, quality and performance of game systems.         Learning Outcomes       In successful completion of this module the learner should be able to:         LO1       Work in teams to design a gameplay experiment by stating a hypothesis and selecting appropriate metrics to track in real time.         LO2       Analyse experimental results to make data-informed decisions.         LO3       Identify, track, and resolve issues arising from the analysis of a game system relating to game feel and software quality.         Pre-requisite learning       Module Recommendations listed         Incompatible Modules       Incompatible modules listed         No incompatible modules listed       Co-requisite modules listed         Requirements       Requirements         No incompatible modules listed	Credits:		5				
Module Delivered In       1 programme(s)         Teaching & Learning       The module uses Problem Based Learning (PBL). The students are initially given an induction into this way of learning. Subsequently, they are given a number of team problems to solve. Each student has the opportunity to play different roles within their team. The problems are tackled in a studie on information and guidance provided by the module tutors. At the end of the cycle, the students present their findings to the tutors and their peers. The students also tackle an individual problem that incorporates all elements from the team problems, along with some new challenges.         Module Aim:       The module teaches state of the art tools and processes to make data-informed decisions in a team-based environment that iteratively improve the game feel, quality and performance of game systems.         Learning Outcomes       In successful completion of this module the learner should be able to:         LO1       Work in teams to design a gameplay experiment by stating a hypothesis and selecting appropriate metrics to track in real time.         LO2       Analyse experimental results to make data-informed decisions.         LO3       Identify, track, and resolve issues arising from the analysis of a game system relating to game feel and software quality.         Pre-requisite learning       Module Recommendations listed         Incompatible Modules       Incompatible modules listed         No incompatible modules listed       Co-requisite modules listed         Requirements       Requirements         No incompatible modules listed			 				
Teaching & Learning       The module uses Problem Based Learning (PBL). The students are initially given an induction into this way of learning. Subsequently, they are given a number of team problems to solve. Each student has the opportunity to play different roles within their team. The problems are tackled in a studio environment with supervision and guidance provided by the module tutors. At the end of the cycle, the students present their findings to the tutors and their peers. The students also tackle an individual problem that incorporates all elements from the team problems, along with some new challenges.         Module Alm:       The module taches state of the art tools and processes to make data-informed decisions in a team-based environment that iteratively improve the game feel, quality and performance of game systems.         Learning Outcomes       The module the learner should be able to:         L01       Work in teams to design a gameplay experiment by stating a hypothesis and selecting appropriate metrics to track in real time.         L02       Analyse experimental results to make data-informed decisions.         L03       Identify, track, and resolve issues arising from the analysis of a game system relating to game feel and software quality.         Pre-requisite learning       Modules Recommendations         This is prior learning in dudies listed       Incompatible modules listed         No incompatible modules listed       Co-requisite modules listed         Requirements       Their is mandatory before enrolment in this module is allowed.	NFQ Level:		8				
Strategiës:       of learning: Subsequently, they are given a number of tearn problems to solve. Each student has the opportunity to play different roles within their team. The problems are tackled in a studio environment with subgervision and guidance provided by the module tutors. At the end of the cycle, the studients present their grindings to the tutors and their peers. The students also tackle an individual problem that incorporates all elements from the team problems, along with some new challenges.         Module Aim:       The module teaches state of the art tools and processes to make data-informed decisions in a team-based environment that iteratively improve the game feel, quality and performance of game systems.         Learning Outcomes       On successful completion of this module the learner should be able to:         L01       Work in teams to design a gameplay experiment by stating a hypothesis and selecting appropriate metrics to track in real time.         L02       Analyse experimental results to make data-informed decisions.         L03       Identify, track, and resolve issues arising from the analysis of a game system relating to game feel and software quality.         Pre-requisite learning       Module Recommendations         This is prior learning outcomes that are too similar to the learning outcomes of this module.         No recommendations listed       Incompatible modules listed         Co-requisite modules listed       Co-requisite modules listed skill) that is mandetory before enrolment in this module is allowed.         No incompatible modules listed       Requirements <td< td=""><td>Module Deli</td><td>vered In</td><td></td><td>1 programme(s)</td></td<>	Module Deli	vered In		1 programme(s)			
environment that iteratively improve the game feel, quality and performance of game systems.          Learning Outcomes         On successful completion of this module the learner should be able to:         L01       Work in teams to design a gameplay experiment by stating a hypothesis and selecting appropriate metrics to track in real time.         L02       Analyse experimental results to make data-informed decisions.         L03       Identify, track, and resolve issues arising from the analysis of a game system relating to game feel and software quality.         Pre-requisite learning       Module Recommendations         This is prior learning (or a practical skill) that is recommended before enrolment in this module.       No recommendations listed         No encompatible Modules       These are modules which have learning outcomes that are too similar to the learning outcomes of this module.         No incompatible modules listed       Requirements         Requirements       This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.				of learning. Subsequently, they are given a number of team problems to solve. Each student has the opportunity to play different roles within their team. The problems are tackled in a studio environment with supervision and guidance provided by the module tutors. At the end of the cycle, the students present their findings to the tutors and their peers. The students also tackle an individual problem that incorporates all			
On successful completion of this module the learner should be able to:         LO1       Work in teams to design a gameplay experiment by stating a hypothesis and selecting appropriate metrics to track in real time.         LO2       Analyse experimental results to make data-informed decisions.         LO3       Identify, track, and resolve issues arising from the analysis of a game system relating to game feel and software quality.         Pre-requisite learning         Module Recommendations This is prior learning (or a practical skill) that is recommended before enrolment in this module.         No recommendations Insted       Incompatible Modules These are modules which have learning outcomes that are too similar to the learning outcomes of this module.         No incompatible modules listed       Co-requisite Modules         No Co-requisite modules listed       Requirements This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.	Module Aim:						
LO1       Work in teams to design a gameplay experiment by stating a hypothesis and selecting appropriate metrics to track in real         LO2       Analyse experimental results to make data-informed decisions.         LO3       Identify, track, and resolve issues arising from the analysis of a game system relating to game feel and software quality.         Pre-requisite learning         Module Recommendations This is prior learning (or a practical skill) that is recommended before enrolment in this module.         No recommendations listed       Incompatible Modules These are modules which have learning outcomes that are too similar to the learning outcomes of this module.         No incompatible modules listed       Co-requisite modules listed         Requirements This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.	Learning Ou	itcomes					
time.       time.         LO2       Analyse experimental results to make data-informed decisions.         LO3       Identify, track, and resolve issues arising from the analysis of a game system relating to game feel and software quality.         Pre-requisite learning         Module Recommendations This is prior learning (or a practical skill) that is recommended before enrolment in this module.         No recommendations listed       Incompatible Modules These are modules which have learning outcomes that are too similar to the learning outcomes of this module.         No incompatible modules listed       Co-requisite modules listed         No Co-requisite modules listed       Requirements This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.	On successfu	ul completio	n of th	his module the learner should be able to:			
LO3       Identify, track, and resolve issues arising from the analysis of a game system relating to game feel and software quality.         Pre-requisite learning         Module Recommendations         This is prior learning (or a practical skill) that is recommended before enrolment in this module.         No recommendations listed         Incompatible Modules         These are modules which have learning outcomes that are too similar to the learning outcomes of this module.         No incompatible modules listed         Co-requisite Modules         No Co-requisite modules listed         Requirements         This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.	LO1						
Pre-requisite learning         Module Recommendations This is prior learning (or a practical skill) that is recommended before enrolment in this module.         No recommendations listed         Incompatible Modules These are modules which have learning outcomes that are too similar to the learning outcomes of this module.         No incompatible modules listed         Co-requisite Modules         No Co-requisite modules listed         Requirements This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.	LO2	Analyse experimental results to make data-informed decisions.					
Module Recommendations         This is prior learning (or a practical skill) that is recommended before enrolment in this module.         No recommendations listed         Incompatible Modules         These are modules which have learning outcomes that are too similar to the learning outcomes of this module.         No incompatible modules listed         Co-requisite Modules         No Co-requisite modules listed         Requirements         This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.	LO3	D3 Identify, track, and resolve issues arising from the analysis of a game system relating to game feel and software quality.		nd resolve issues arising from the analysis of a game system relating to game feel and software quality.			
This is prior learning (or a practical skill) that is recommended before enrolment in this module.         No recommendations listed         Incompatible Modules         These are modules which have learning outcomes that are too similar to the learning outcomes of this module.         No incompatible modules listed         Co-requisite Modules         No Co-requisite modules listed         Requirements         This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.	Pre-requisite learning						
Incompatible Modules         These are modules which have learning outcomes that are too similar to the learning outcomes of this module.         No incompatible modules listed         Co-requisite Modules         No Co-requisite modules listed         Requirements         This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.							
These are modules which have learning outcomes that are too similar to the learning outcomes of this module.         No incompatible modules listed         Co-requisite Modules         No Co-requisite modules listed         Requirements         This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.	No recomme	ndations list	ted				
Co-requisite Modules No Co-requisite modules listed Requirements This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.							
No Co-requisite modules listed  Requirements This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.	No incompatible modules listed						
<b>Requirements</b> This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.	Co-requisite	Modules					
This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.	No Co-requisite modules listed						
No requirements listed							
	No requirements listed						



## **GAME: Game Analytics**

# Module Content & Assessment

## Indicative Content

Data-Driven Decision Making Experiment design. Gathering Telemetry. Quantitative analysis. Qualitative analysis. Making decisions based on data. Making decisions as a team.

### **Enhancing Game Feel**

Improve players tactile, emotional and aesthetic response to a game system through playtesting, iterative refinement and analysis of data.

## **Quality Assurance**

Bug and crash reporting tools. Building on existing codebases. Roles within a team. Ownership and responsibility. Conflict resolution.

Software Optimisation Optimising game systems for performance and efficiency.

Assessment Breakdown	%		
Project	100.00%		

## No Continuous Assessment

Project							
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date			
Project	The students will complete a team problem shared across modules. They will play roles based on in the Problem Based Learning (PBL) model. Each problem will be assessed under product and process.	1,2,3	30.00	Week 5			
Project	The students will complete a team problem. They will play roles based on in the Problem Based Learning (PBL) model. Each problem will be assessed under product and process.	1,2,3	30.00	Week 9			
Project	The students will complete an individual problem. The problem will involve the design, implementation and evaluation of a game system or simulation that can be used in the team problem. They will improve their component based on the experience and feedback from the team problem.	1,2,3	40.00	Week 12			

No Practical

No End of Module Formal Examination

SETU Carlow Campus reserves the right to alter the nature and timings of assessment



# **GAME: Game Analytics**

## Module Workload Workload: Full Time Average Weekly Learner Workload Workload Type Frequency 12 Weeks per Stage Lecturer-Supervised Learning (Contact) 2.00 12 Weeks per Stage Studio Based Learning 4.00 15 Weeks per Stage Independent Learning 3.53 **Total Hours** 125.00

Module Delivered In								
Programme Code	Programme	Semester	Delivery					
CW_KCCGD_B	Bachelor of Science (Honours) in Computer Games Development	8	Mandatory					