Module Title:	Developing for Games Devices
Language of Instruction:	English

Credits:	5

NFQ Level:	7

Module Delivered In	No Programmes

Teaching & Learning Strategies:	The course material is delivered in a studio environment in which students are given lectures, including guest lecturers from industry, interactive labs, and practical exercises. In tandem, students design and develop a single player game for mobile/web and then develop a multiplayer mode for this game.

Module Aim:	Design and develop games for mobile and web platforms.

Learning Outcomes	
On successful completion of this module the learner should be able to:	
LO1	Design and implement 2D mobile and web games
LO2	Design and implement networked games for mobile and web
LO3	Deploy and test games on mobile and web
LO4	Submit a game to an app store

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.*
No requirements listed

Module Content & Assessment

Indicative Content

Development environment
Introduction to tools for development, debugging, source control, project management; coding standard

Basic animation and graphics
Game design, game loop, rendering primitives, game input (keyboard, mouse), movement, collision detection, particle systems

User interface
UI/UX, managing game states

Sprite animation and audio
Sprite animation, asset manager, loading files, sprite sheets, texture packing, sound effects, background music

Device development
Deployment, debugging, game input (touch), audio, loading metadata, persistence of game data, integrating sub-systems, game balance, playtesting

Multiplayer games
Sockets, serialisation, message based systems, player management, session management, cloud hosting, server deployment

Store submission
Submission process, asset preparation, distribution build, testing distribution build

Assessment Breakdown	%
Continuous Assessment	40.00%
Project	60.00%

Continuous Assessment

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Examination	Class test	1,2,3,4	10.00	n/a
Other	Learning Resource 1	1,2,3	10.00	n/a
Other	Learning Resource 2	1,2,3	10.00	n/a
Practical/Skills Evaluation	Labs	1,2,3	10.00	n/a

Project

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	Project 1	1,3	30.00	Sem 1 End
Project	Project 2	1,2,3,4	30.00	Sem 2 End

No Practical

No End of Module Formal Examination

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

Module Workload

Workload: Full Time		
Workload Type	*Frequency*	*Average Weekly Learner Workload*
Laboratory	20 Weeks per Stage	4.00
Estimated Learner Hours	20 Weeks per Stage	1.00
	Total Hours	100.00