

Module Specification

Module Summary Information

1	Module Title	Game Development using Console
2	Module Credits	20
3	Module Level	6
4	Module Code	CMP6181

5	Module Overview
<p>The games console industry is a very lucrative market appealing to consumers of all ages and backgrounds. Game consoles are still one of most important ways of publishing AAA game titles. In recent years, AAA game studios no longer exclusively use commercial game engines with many vendors keen that students get the opportunity to work with them too. This module will provide you with the opportunity to explore how to develop games for consoles working with industry standard technology. This will give you further opportunity to add industry relevant skills to your portfolio, increasing opportunities for employment in the games industry. Our teaching approach is practical-based learning and you will get 'hand-on' experience of programming with a game engine used in developing games for consoles. Practical sessions will be tutorials covering important issues associated with console game development. In addition, you will be provided formative feedbacks on the program you write during sessions as well as the assessment.</p>	

6	Indicative Content
<ul style="list-style-type: none"> • Using toolchains on different game console platforms. • Multi-threaded programming for game consoles. • Console game development using game engine. • Performance analysis and optimisation. • Asset workflow. • Handling input from different types of game pad/controller. • Managing game processing load on CPU/GPU. • CPU/GPU memory management. • Backend systems such as party/matchmaking systems. • Managing source code for different game console platforms. • Managing source code build configurations. • Debugging and interpreting core dumps. • Advanced GPU techniques. • Deploying to game console and requirement checks. 	

7		Module Learning Outcomes
On successful completion of the module, students will be able to:		
	1	Design and develop a prototype game based on a specific game theme and mechanics to run on a game console.
	2	Present preliminary results from the prototype game scene and propose a development plan for fully featured game.
	3	Implement a fully featured and optimised game deployed to a game console.
	4	Present a critical analysis of developing a game for a game console.

8		Module Assessment		
Learning Outcome				
	Coursework	Exam	In-Person	
1-4			X	

9		Breakdown Learning and Teaching Activities
Learning Activities	Hours	
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable	48	
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE	62	
Private Study (PS) includes preparation for exams	90	
Total Study Hours:	200	