



## MODULE SPECIFICATION

Part 1: Information			
Module Title	Commercial Games Development		
Module Code	UFCFM4-30-3	Level	Level 6
For implementation from	2021-22		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Environment & Technology	Field	Computer Science and Creative Technologies
Department	FET Dept of Computer Sci & Creative Tech		
Module Type:	Standard		
Pre-requisites	Game Engine Programming 2020-21, Gameplay Programming 2020-21, More Games in C++ 2020-21		
Excluded Combinations	None		
Co-requisites	None		
Module Entry Requirements	None		
PSRB Requirements	None		

Part 2: Description
<p><b>Overview:</b> Pre-requisites: students must take UFCFXG-30-2 More Games in C++ PLUS one out of UFCF7M-30-2 Gameplay Programming or UFCF9M-30-2 Game Engine Programming</p> <p><b>Educational Aims:</b> Software technology used in the games industry is increasingly complex, with competing, even conflicting requirements. Balancing sound software development practices with coherent and engaging game design with consumers expecting increasing standards of presentation and performance.</p> <p>Upon graduating, students will be expected to be able to respond to these trends and to be able to function effectively in a rapidly moving field. They will further be required to provide suitable solutions to development problems as they occur in a professional setting while maintaining awareness of relevant legal, social and ethical practice in line with the IGDA code of ethics.</p> <p><b>Outline Syllabus:</b> This module provides a platform for students to engage with a challenging, viable product brief, not only requiring development of a commercial entertainment product, but also the successful navigation of a range of social, ethical and commercial issues.</p> <p>Further to this, core module content includes:</p>

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Input and display devices

Platform hardware and associated SDK use

Camera control, collision detection, AI or procedurality

Integration of graphic resources, animation, effects and shaders

Audio processing, environmental audio, music and event driven effects

Network protocols, multiplayer technology, gameplay and mechanics

Monetisation, marketing, management, social media, funding and ethics

Deployment testing, profiling and optimisation techniques

File formats, game persistence, build engineering

Licensing, copyright, royalty rate and distribution

**Teaching and Learning Methods:** Taught material specific to key technical challenges and conceptual topics will be presented through lectures and bespoke group meetings, presentations and studio based seminars delivered by expert staff or industry professionals, with conceptual content towards the start and technical content throughout.

Support will be provided throughout the module through practical studio sessions, with a dedicated team of teaching staff taking on industry roles and overseeing development.

Typically, for a given target platform students will be required to work in groups, and will be presented with brief and concept at the start of the year, towards which they must formulate a pitch. Once green-lit they must design and implement a prototype of a game which, if successful, will be allowed to progress on through alpha towards beta and the final stages.

The whole group will be involved in the technical development of the game scenario and any associated gameplay mechanics. The whole group will also contribute to the presentations on the work at each stage of development.

### Part 3: Assessment

Formative assessment:

Formative feedback is offered throughout the module, in studio, play-testing and regular presentation sessions. Staff are also on-hand to support individuals and groups weekly, discussing progress and providing progression feedback.

Summative assessment:

The final portfolio of deliverables includes a platform specific 'vertical slice' build, accompanied by appropriate supporting industry standard documentation. The portfolio also contains a personal development report for each team member, compiled throughout the module as well as a final co-authored post-mortem, critically evaluating process and progress within the project team.

The final presentation / viva offers students the opportunity to highlight key technical aspects of their contribution to the finished product and to explain how they have considered legal, social, ethical and commercial issues in the run up to readying the product for market. They will also be assessed on how well they explain their development decisions and the alternative approaches that could have been taken.

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First Sit Components	Final Assessment	Element weighting	Description
Presentation - Component A	✓	30 %	Presentation/viva (30 minutes)
Portfolio - Component B		70 %	Portfolio
Resit Components	Final Assessment	Element weighting	Description
Presentation - Component A	✓	30 %	Presentation/viva (30 minutes)
Portfolio - Component B		70 %	Portfolio

### Part 4: Teaching and Learning Methods

Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes:	
	<b>Module Learning Outcomes</b>	<b>Reference</b>
	Identify, demonstrate and execute industry appropriate production and development practice for an entertainment software product	MO1
	Design, implement and deploy polished, commercially viable software, successfully managing the transition from key development stages, making appropriate use of industry tools and practice	MO2
	Recognise, investigate and diagnose specific issues relating to performance and accessibility associated with given SDK or deployment platforms through the application of appropriate strategy	MO3
	Demonstrate in-depth understanding of core legal, social, and ethical issues in professional game development practice	MO4
	Successfully recognise, understand and comply with relevant issues of ownership, quality, licensing and finance for commercially viable software	MO5
	Present and demonstrate the final product, addressing technical questions regarding implementation strategy, development practice or technical hurdles and be able to discuss the role and significance of key components	MO6
Contact Hours	<b>Independent Study Hours:</b>	
	Independent study/self-guided study	228
	<b>Total Independent Study Hours:</b>	228
	<b>Scheduled Learning and Teaching Hours:</b>	
	Face-to-face learning	72
	<b>Total Scheduled Learning and Teaching Hours:</b>	72

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	<b>Hours to be allocated</b>	300
	<b>Allocated Hours</b>	300
Reading List	<p><i>The reading list for this module can be accessed via the following link:</i></p> <p><a href="https://uwe.rl.talis.com/modules/ufcfm4-30-3.html">https://uwe.rl.talis.com/modules/ufcfm4-30-3.html</a></p>	

### Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Games Technology [Sep][FT][Frenchay][3yrs] BSc (Hons) 2019-20

Games Technology [Sep][SW][Frenchay][4yrs] BSc (Hons) 2018-19

Games Technology {Foundation} [Sep][FT][Frenchay][4yrs] BSc (Hons) 2018-19

Digital Media {Top-Up} [Sep][FT][SHAPE][1yrs] BSc (Hons) 2019-20

Digital Media [Sep][FT][Frenchay][3yrs] BSc (Hons) 2019-20

Digital Media [Sep][SW][Frenchay][4yrs] BSc (Hons) 2018-19

Digital Media {Foundation}[Sep][FT][Frenchay][4yrs] BSc (Hons) 2018-19