University of the West of England
BRISTOL

ACADEMIC SERVICES

PROGRAMME SPECIFICATION

Part 1: Basic Data			
Awarding Institution	UWE		
Teaching Institution	UWE		
Delivery Location	UWE Frenchay Campus.		
Study abroad / Exchange / Credit recognition			
Faculty responsible for programme	Faculty of Environment and Technology (FET)		
Department responsible for programme	Department of Computer Science and Creative Technologies.		
Modular Scheme Title			
Professional Statutory or Regulatory Body Links			
Highest Award Title	MSc Commercial Games Development		
Default Award Title			
Fall-back Award Title			
Interim Award Titles	PG Dip Commercial Games Development PG Cert Commercial Games Development		
UWE Progression Route	N/A		
Mode(s) of Delivery	FT / PT		
Codes	**UCAS: 16001**	**JACS:**	
	ISIS2: 160012	**HESA:**	
Relevant QAA Subject Benchmark Statements			
First CAP Approval Date	2 June 2016	Valid from	September 2016
Revision CAP Approval Date		Revised with effect from	
Version	1		
Review Date	*June 2022*		

Part 2: Educational Aims of the Programme
The broad educational aims of the programme are to: • Provide an intellectual experience of study in the field of games technology, underpinned by staff with both technical and commercial expertise, through advanced

Part 2: Educational Aims of the Programme

industry and research and enterprise activity.

- Develop knowledge of games technology, beyond undergraduate level study, towards cutting edge practice that spans both industry and academia.

- Form strong professional identities as developer-practitioners which allow graduates to excel within the field of games development, in industry and across a growing field of 'games technology for the real world' applications.

- To meet need for continuing professional development in games development, additionally providing postgraduate opportunities for part-time students in employment.

Further, specific aims of the programme are to:

- Build on strengths of existing undergraduate programme Games Technology BSc, and the PlayWest Enterprise Studio, aligning postgraduate study with live commercial game, research and development projects.

- Combine strands of games development, academic research and industry operations to:
    - Embed students in a commercial studio with live game products
    - Undertake advanced research and development projects in real-world settings
    - Culminate in a dissertation within an emerging research area wide open for exploration.

- Imbue students with extensive development practice and enterprise experience, fostering their ability to capitalise on exciting opportunities available upon graduation; in industry, academe and emergent applications of games technology in the real world.

- To ensure strong onward trajectory for graduates through linking with Business & Enterprise within the University to support students who wish to pursue their own entrepreneurial or enterprise approaches to capitalise on the opportunities offered within the programme.

Programme requirements for the purposes of the Higher Education Achievement Record (HEAR)

Not applicable for postgraduate level.

Part 3: Learning Outcomes of the Programme

The award route provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas:

Learning Outcomes:		Module No: UFCFBK-60-M	Module No: UFCFCK-60-M	Module No: UFCFUD-60-M
A) Knowledge and understanding of:				
i.	Advanced entertainment software development and typical product lifecycles. Software testing, profiling, debugging and optimisation across a range of target platforms.	x	x	x
ii.	Consultancy, stakeholder engagement, enterprise setup, commercial awareness, financial planning, legal social and ethical issues	x	x	
iii.	Project management; development stages/problems - (crunch, scalability, discoverability, pipeline, team productivity, wellbeing)	x		
iv.	Marketing & market awareness, public relations, funding streams, emerging practices, bidding/pitching/publishing, crowd funding.	x		
v.	Advanced research and development methodologies and technologies of both academic and industry focus		x	x
vi.	*(ESD) Concepts and over-arching concerns of sustainable development, in general and within games development in particular, including global citizenship, environmental stewardship, social justice, ethics and well-being, a future-facing outlook on consequences of actions and ensuring sustainable futures.*		x	
(B) Intellectual Skills				
i.	A systematic understanding of the field of games technology and its commercial context, critical awareness of issues and developments within this rapidly moving area.	x	x	
ii.	A comprehensive, practical, understanding of development techniques and methodologies applied in the development of games software, for entertainment and real-world application.	x	x	

Part 3: Learning Outcomes of the Programme

iii.	An ability to identify areas of innovation and research within their field, and a practical understanding of established techniques for pursuing research and development opportunities.		x	x	
iv.	An ability to creatively apply and evaluate techniques and methodologies core to games development in cross-disciplinary contexts, to propose new directions worthy of pursuit in both academic and professional settings.	x	x	x	
v.	Critically analyse and formally document research and development processes to engage with and promote scholarship within the discipline and across new areas of application.		x	x	
vi.	*(ESD) An understanding of sustainable development in the context of games technology, the cultural value of games in promoting change and social justice, and the potential in game constructs such as playable data and immersive alternative realities in cross-disciplinary applications to promote change for good.*		x		
(C) Subject/Professional/Practical Skills					
i.	Apply games, creative concepts or other technologies to non-trivial commercial entertainment software products or research projects.	x	x	x	
ii.	Use established methods to assess and manage projects and risks, across conceptualisation, development and commercialisation.	x	x	x	
iii.	Undertake real-life pitching, stakeholder engagement, scoping and costing of commercial games and industry projects; and engage with processes around their products, including contracts for intellectual property and publishing.	x	x		
iv.	Assume responsibility in line with a) Delivery of aspects of commercial games software products, and b) R&D work in a team environment, and to understand operational differences in development.	x	x		
v.	Testing, profiling, debugging and optimisation strategies across both academic and commercial software development projects.	x	x	x	
(D) Transferable skills and other attributes					
i.	Communication skills: Problem / project owners and collaborator interaction across a range of media including pitches, presentations, proposals as well as both technical and academic documentation.	x	x	x	
ii.	Self-management, problem formulation, solving and decision making skills; the ability to manage own time, meet deadlines, exercise initiative and take personal responsibility for decision-making in complex and unpredictable situations	x	x	x	
iii.	Teamwork and collaboration: The ability to effectively negotiate the balance between taking direction and exercising initiative as well as an awareness of the benefits and pitfalls of group work on creative yet technical projects.	x	x		
iv.	Comprehension of professional and academic literature: to read and use literature sources appropriate to discipline, field, level and problem.	x	x	x	
v.	Progression to independent learning as required for continuing professional development.	x	x	x	

Part 4: Student Learning and Student Support

Teaching and learning strategies to enable learning outcomes to be achieved and demonstrated

At UWE, Bristol there is a policy for a minimum average requirement of 12 hours / week contact time over the course of a full-time postgraduate programme, scaled pro-rata for part-time provision. This contact time encompasses a range of face to face activities as described below. In addition, a range of other learning activities will be embedded within the programme which, together with the contact time, will enable learning outcomes to be achieved and demonstrated.

For the MSc Commercial Games Development programme teaching and learning activities centre around the practical application of, and innovation around advanced concepts within the field, as well as professional-level problem-based learning. An emphasis is put on the role of individuals as part of a professional environment, with significant aspects of team-based work, as well as collaborative exploration of individual topics of research, peer review and discussions.

Scheduled learning is largely studio-based but also includes separately scheduled project supervision, presentations, workshops and occasional external visits. Scheduled learning will, where possible, be timetabled within a single day per week, per taught module, allowing students to immerse themselves fully in the module and facilitating part-time study alongside work commitments.

Independent learning includes hours engaged with essential and additional reading, project, portfolio and other assignment preparation and completion, etc.

Description of the learning resources provided for students

- Games development studio environment within University's first Technology Enhanced Active Learning (TEAL) space.
- Games development related hardware resources, including console development kits and large range of peripherals including Virtual and Augmented Reality hardware.
- Online communication, collaboration and version control tools for use in line with industry expectation.
- Formal module and programme information, as well as taught material and other resources will be provided through the University's Virtual Learning Environment (VLE).

Description of any Distinctive Features

As part of the programme, students are immersed in the PlayWest studio environment and play an active role across a range of live projects and professionally-based activities, supplementing larger project trajectories, which in turn contribute towards their own learning, project portfolios and onward trajectories.

A specific aim of the programme is to marry industry practice with established and emerging academic research to form graduates ready to effectively engage in both academic and industry.

Part 5: Assessment

Approved to University Regulations and Procedures

Assessment Strategy

Assessment strategy to enable the learning outcomes to be achieved and demonstrated is based on a variety of means;

- Written assessments will take a variety of forms including academic and industry research papers; design, process and development documentation; and reflective individual and team reports; culminating in the individual written dissertation report.
- Software development skills will be assessed through methods including demonstration of software products, interrogation of program code, logged use of development repositories and collaborative development environments.
- Oral presentation skills will be assessed individually and in groups, through a range of presentations, pitches and viva examinations.

Formative assessment:

- Iterative design and development is core to games development practice, and within the studio environment of the programme. Students will be expected to iteratively demonstrate, evaluate, and reflect on practical, written and team work with peers, academics and managers. These activities will be scaffolded by studio and team meetings, alongside regular one to one's to scaffold academic performance, practitioner craft and onward trajectory.

This range of assessments is designed to

- Identify students' learning strengths and weaknesses, and individual and group development needs.
- Engage students in a range of formative and summative assessment methods relevant in the development of both professional and academic identities.
- Expose students to a variety of assessments to promote inclusive learning.
- Encourage and students to move dynamically between theory and practice, with each informing the other.
- Develop students' effectiveness in working independently and as part of a group.
- Encourage students to develop a deep approach to learning.
- Allow students to effectively demonstrate their learning as measured against learning outcomes and professional competency.

Part 6: Programme Structure
This structure diagram demonstrates the student journey from Entry through to Graduation for a typical **full time student**, including: level and credit requirements interim award requirements module diet, including compulsory and optional modules

ENTRY		Compulsory Modules	Optional Modules	Interim Awards
	Year 1	UFCFBK60-M Commercial Games Studio	None	*PG Cert Commercial Games Development 60CR* *PG Dip Commercial Games Development 120CR*
		UFCFCK 60-M Games Research & Development	None	
		UFCFUD-60-M Dissertation by Research & Development	None	

GRADUATION

Part time: The following structure diagram demonstrates the student journey from Entry through to Graduation for a typical **part time student.**

ENTRY		Compulsory Modules	Optional Modules	Interim Awards
	Year 1	UFCFBK-60-M Commercial Games Studio	None	*PG Cert Commercial Games Development 60CR*
	Year 2	UFCFCK-60-M Games Research & Development	None	*PG Dip Commercial Games Development 120CR*
	Year 2	UFCFUD-60-M Dissertation by Research & Development	None	

GRADUATION

Part 7: Entry Requirements
The University's standard entry requirements for a postgraduate programme apply: At least a 2.2 honours Bachelor's degree in Games Technology, Computer Science or closely related discipline, and/or extensive relevant professional experience is required. A copy of the Academic Regulations is available from the University website.

Part 8: Reference Points and Benchmarks

Description of ***how*** the following reference points and benchmarks have been used in the design of the programme:

QAA UK Quality Code for HE
- National qualification framework
- Subject benchmark statements
- Qualification characteristics for Foundation degrees and Master's degrees (if applicable)

University strategies and policies
Staff research projects
Any relevant PSRB requirements
Any occupational standards
- Reference should be made to the graduate outcomes identified in the QAA-HEA Guidance

In designing this programme, the following external reference points and benchmarks have been used:

- QAA UK Quality Code for HE
  - National qualification framework
  - Subject benchmark statement - Master's in Computing
  - QAA Master's degree characteristics
- University strategies and policies
- PlayWest games / research & development projects
- Industry consultation & external academic advice
- Academic services
  - Careers / library

The design of this programme, and its associated module specifications, has been focused around documented industry shortfall in adequately skilled technical/programming staff and CPD provision, verified through industry reports (NESTA Next Gen Skills / TIGA), PSRB educational advisor / external academic, and range of industry professionals; taking opportunities arising alongside the PlayWest Enterprise Studio, which houses commercial games development projects, as well as innovative cross-disciplinary research and development work, to break new ground in postgraduate provision for games.

With students collocated with, and working on live PlayWest projects, the programme fits broadly within the 'professional / practice-based' category of MSc's as described by the QAA, with the important distinction that a key aim of the degree is for students to undertake 'advanced / specialised study' to foster new strands of academic research in an industry-driven discipline not usually associated with extensive academic research output.

Aims and learning outcomes of the programme and modules have been explicitly designed to align with Master's level study as defined within the FHEQ / SEEC descriptors and the QAA qualification characteristics for Master's degrees, matching vocabulary where possible to make these links particularly clear. While no subject specific benchmark exists for games development, strong correlation has been ensured with aspects of the SBS for Master's degrees in Computing particularly relevant within games development and in the use of games technology in wider application areas.

The ambitions of the programme and PlayWest closely matches those of the wider University; particularly in providing outstanding and innovative learning opportunities to breed ready and able graduates; in establishing new avenues for research with impact through the use of

Part 8: Reference Points and Benchmarks

games technology for real-world applications; and in forming strategic partnerships, connections and networks, building further upon the partnerships formed by PlayWest, including those with Bloodhound SSC, Rolls-Royce, Sony Computer Entertainment Europe.

While not traditionally associated with sustainability or ethical endeavour, the value of games as vessels for promoting change is increasingly recognised across a range of disciplines. With 'serious' projects using games, virtual/augmented reality and playable data to illustrate and promote change around issues spanning food waste, sustainable behaviour, air quality, water security, health and safety; a rich vein of games for sustainable development is embedded within PlayWest activities, ready for dissemination in line with QAA guidelines on Education for Sustainable Development.

What methods have been used in the development of this programme to evaluate and improve the quality and standards of learning? This could include consideration of stakeholder feedback from, for example current students, graduates and employers.

- Employer / industry input / feedback
- Current student / graduate consultation
- External academic / PSRB input / feedback

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of individual modules can be found in module specifications, available on the University's website.