

Course Specification

Programme Summary Information			
1	Course Titles		BSc (Hons) Computer Games Technology MSci Computer Games Technology
2	BCU Course Codes	UCAS Codes	BSc (Hons) US0667 MSci UM0042
			G450 I621
3	Awarding Institution		
	Birmingham City University		
4	Teaching Institution(s) (if different from point 3)		
5	Professional Statutory or Regulatory Body (PSRB) accreditation (if applicable)		

6	Programme Description
	<p>Do you want to have a successful career in the computer games industry? Our BSc (Hons) / MSci Computer Games Technology course has been developed with input and feedback from leading professionals as well as our own students.</p> <p>While studying your computer games degree, you will use our state-of-the-art computer games technology lab, which is kitted with high-performance PCs, Sony PlayStation development kits, as well as a variety of industry standard software.</p> <p>Our collaborations with Microsoft and Sony, and state-of-the-art technology will help you develop the skills you need to be successful in the games industry and beyond.</p> <p>What's covered in the course?</p> <p>On the course, you will learn a range of technical and professional skills, including understanding fundamentals and advanced coding practices, graphics programming, network communications and artificial intelligence. You will work independently and in teams, as well as develop strong written and oral communication skills.</p> <p>The course philosophy highlights the importance of going beyond your studies – therefore, we encourage you to participate in many extracurricular activities. As we are located in the heart of Birmingham city centre, we are close to many independent game studios, who host events throughout the year. We also regularly participate in international game development competitions such as Global Game Jam and Microsoft's Imagine Cup, all of which give you the opportunity to showcase your talent on a wider stage, and network with others in the industry.</p> <p>You will not only learn about mainstream and traditional video game development, but also explore allied and emerging disciplines such as serious and educational game development, augmented and virtual reality, as well as simulations.</p> <p>Studying computing with us puts you at the heart of an exciting, innovative community. Part of your first-year assessment will involve taking part in our annual Innovation Fest, where students get together to solve society's problems with creative technology. Previous projects have included medical assistance drones, accessible gaming controllers, and smart housing</p>

	<p>solutions. The event brings together students, academics and industry guests, so it's a great way to have fun, build experience and network, and win prizes!</p> <p>Upon graduation, you could progress into a range of careers in the game industry, for example game or graphics programmer, tools programmer or QA tester in either larger companies or independent studios. You will also have the skills to enable you to work in allied disciplines such as a serious or educational game developer. Alternatively, you could work in more traditional computing or software engineering roles, start your own company or progress into further education.</p>
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7	Programme Awards		
7a	Possible Final Awards for the Computer Games Technology programme	Level	Credits Awarded
	For BSc (Hons):		
	Bachelor of Science with Honours Computer Games Technology	6	360
	Bachelor of Science with Honours Computer Games Technology with Sandwich Year	6	360
	For MSci:		
	Integrated Masters of Science Computer Games Technology	7	480
	Integrated Masters of Science Computer Games Technology with Sandwich Year	7	480
7b	Possible Exit Awards and Credits Awarded for the Computer Games Technology programme		
	Certificate of Higher Education Computer Games Technology	4	120
	Diploma of Higher Education Computer Games Technology	5	240
	Bachelor of Science Computer Games Technology	6	300

8	Derogation from the University Regulations
	Not applicable

9	Delivery Patterns		
	Mode(s) of Study	Location	Duration of Study
	BSc (Hons) Full Time	City Centre	3 years
	BSc (Hons) Sandwich	City Centre	4 years
	MSci Full Time	City Centre	4 years
	MSci Sandwich	City Centre	5 years
			Code
			US0667
			US0667S
			UM0042
			UM0042S

10	Entry Requirements
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The admission requirements for this programme are stated on the programme page of the BCU website at <https://www.bcu.ac.uk/> or may be found by searching for the programme entry profile located on the UCAS website.

11 Programme Learning Outcomes	
Knowledge & Understanding	
1	Understand the different processes and life cycles that are needed to develop games.
2	Understand the role that different technologies play in developing games.
3	Understand the importance that different communication strategies play in articulating ideas and achievements to a range of audiences.
4	Understand the need to respond to technical and business changes associated with the industry sector on a local and global level.
Cognitive & Intellectual Skills	
5	Justify and explain approaches and decisions made in developing games.
6	Differentiate and evaluate a range of approaches and tools that are needed to develop games.
7	Appreciate the importance of interdisciplinary collaboration; embrace differing viewpoints and acknowledge diverse input into the development of games.
8	Apply reflective skills and be able to critically evaluate information and subsequently formulate conclusions.
Practical & Professional Skills	
9	Develop a wide range of intellectual, practical and technical skills that can be applied to the development of games and to other allied computing sectors.
10	Gain confidence to learn to implement a range of industry standard technologies that are needed to make games
11	Appreciate the wider and global context of the impact of the work.
12	Develop organisation and presentations skills to a professional standard.
Key Transferable Skills	
13	Research, devise and implement solutions to problems.
14	Develop confidence to learn new skills.
15	The ability to work independently and within teams in order to solve complex problems.
16	Communicate and articulate ideas, concepts and solutions effectively to diverse audiences.

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12b Structure Diagram

Semester	Level 4		
1	Professional Practice for Game Development 20 Credits	CGI Modelling 20 Credits	2D Game Programming 20 Credits
2	Data Structures and Algorithms 20 Credits	CGI Animation 20 Credits	3D Game Programming 20 Credits
	Level 5		
1	3D Game Development 20 Credits	Quality of Service in Network Environments 20 Credits	C++ Programming for Games 20 Credits
2	Enterprise Practice Project 20 Credits	Collaborative Practice 20 Credits	Programming for Game Engines 20 Credits
OPTIONAL PLACEMENT YEAR			
	Level 6		
1	Mobile Game Development 20 Credits	Artificial Intelligence for Games 20 Credits	Individual Project 40 Credits
2	Consultancy and IT Management 20 Credits	Game Development using Console 20 Credits	
	Level 7		
1	Network Game Programming 20 Credits	Real Time Graphics Programming 20 Credits	Emerging Technologies 20 Credits
2	Group Project 60 Credits		

13 Overall Student Workload and Balance of Assessment

Overall student *workload* consists of class contact hours, independent learning and assessment activity, with each credit taken equating to a total study time of around 10 hours. While actual contact hours may depend on the optional modules selected, the following information gives an indication of how much time students will need to allocate to different activities at each level of the course.

- *Scheduled Learning* includes lectures, practical classes and workshops, contact time specified in timetable
- *Directed Learning* includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning
- *Private Study* includes preparation for exams

The *balance of assessment* by mode of assessment (e.g. coursework, exam and in-person) depends to some extent on the optional modules chosen by students. The approximate percentage of the course assessed by coursework, exam and in-person is shown below.

Level 4

Workload

24% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	288
Directed Learning	350
Private Study	562
Total Hours	1200

Balance of Assessment

Assessment Mode	Percentage
Coursework	100%
Exam	0
In-Person	0

Level 5

Workload

24% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	288
Directed Learning	418
Private Study	494
Total Hours	1200

Balance of Assessment

Assessment Mode	Percentage
Coursework	100%
Exam	0
In-Person	0

Level 6

Workload

17% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	202
Directed Learning	288
Private Study	710
Total Hours	1200

Balance of Assessment

Assessment Mode	Percentage
Coursework	72%
Exam	0
In-Person	28%

Level 7

Workload

14% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	162
Directed Learning	264
Private Study	774
Total Hours	1200

Balance of Assessment

Assessment Mode	Percentage
Coursework	38%
Exam	0
In-Person	62%