



**School of Computing, Engineering and Built
Environment**

PROGRAMME SPECIFICATION

for

BSc (Hons) Computer Games (Software Development)

2020/2021

GLASGOW CALEDONIAN UNIVERSITY

Programme Specification Pro-forma (PSP)

1. GENERAL INFORMATION	
1. Programme Title:	BSc (Hons) Computer Games (Software Development)
2. Final Award:	BSc (Hons) Computer Games (Software Development), BSc (Hons) Computer Games (Software Development) (Sandwich)
3. Exit Awards:	Certificate of Higher Education in Computer Games (Software Development) Diploma of Higher Education in Computer Games (Software Development) BSc Computer Games (Software Development), BSc Computer Games (Software Development) (Sandwich)
4. Awarding Body:	Glasgow Caledonian University
5. Approval Date:	Nov 2018
6. School:	School of Computing, Engineering and Built Environment
7. Host Division/Dept:	Applied Computer Games
8. UCAS Code:	W280
9. PSB Involvement:	British Computer Society
10. Place of Delivery:	Glasgow Campus
11. Subject Benchmark Statement:	Computing
12. Dates of PSP preparation/revision:	Nov 2018

2. EDUCATIONAL AIMS OF THE PROGRAMME

- To provide students with the necessary software engineering knowledge and skills to equip them for a career in the development and technical implementation of computer games;
- To provide students with a specific understanding of the concepts, processes, methods and tools, and their application, in the development and technical implementation of computer games;
- To enable students to develop a cultural understanding of computer games and the computer games industry;
- To develop a critical approach to the evaluation of computer games;
- To develop the ability to apply sound design principles and practical skills
- To enable students to acquire good skills in analysis, synthesis and communication;
- To enable students to take responsibility for their own learning as they progress through the programme;
- To assist the student in developing the skills required in adapting to changing technological and organisational developments and learning new skills;
- To provide articulation opportunities to access the programme for students with appropriate prior accredited learning experiences
- To provide education and training which is accredited by the British Computer Society
- To provide opportunity to further develop practical, personal and professional course skills in a work-based environment;

Expected Levels of Attainment

On successful completion of level 1 of study a student should have a basic knowledge and understanding of the application of technical development and design skills applicable to a wide range of computing based systems needs including the development of Computer Games.

On successful completion of level 2 of study a student should have a sound knowledge and competent application of technical development and game play design skills across a range of game genres and implementation platforms.

On successful completion of level 3 of study a student should be able to develop, implement and support computer games across a wide variety of game genres in response to the specification of a perceived industry need, in accordance with fundamental principles and methods, using appropriate techniques and tools.

On successful completion of level H of study a student should, in addition, be able to critically evaluate alternative game solution approaches and genres and be able to use advanced development and implementation techniques in the construction of a solution.

4. PROGRAMME STRUCTURES AND REQUIREMENTS, LEVELS, MODULES, CREDITS AND AWARDS

SCQF Level 7

Module Title	Credit
Mathematics for Computer Games	20
Introduction to Games Design	20
Introduction to Games Programming	20
Fundamentals of Computer Systems	10
Fundamentals of Network & Cloud Computing	10
Introduction to 3D Modelling	20
Integrated Project 1	20
Exit Award – Certificate of Higher Education in Computer Games (Software Development)	120

SCQF Level 8

Module Title	Credit
Games Programming 1	20
Games Design 1	20
3D Maths for Simulation and Visualisation	20
Data Structures & Algorithms	20
Human Computer Interaction	20
Integrated Project 2	20
Exit Award – Diploma of Higher Education in Computer Games (Software Development)	240

SCQF Level 9

Module Title	Credit
Games Programming 2	20
Game Artificial Intelligence	20
Game Preproduction Workshop	20
Graphics Programming	20
Research Skills and Professional Issues	20
Integrated Project 3	20
Exit Award – BSc Computer Games (Software Development)	360

SCQF Level 10

Module Title	Credit
Games Programming 3	20
Network Games Programming	20
Mobile Platform Development* OR	20 OR
Artificial Intelligence	20
Portfolio	20
Honours Project (CCIS)	40
Exit Award – BSc (Hons) Computer Games (Software Development)	480

Industrial Placement Year (Optional) Exit Award.

Students opting to undertake placement do so in the academic session after level 3 studies. Assessment is via the additional level 3 60 credit module, M3I323077 Industrial Placement (CCIS). Successful completion of that module gives (Sandwich) in the final exit award obtained by the student.

* Students in their fourth year have an elective between 'Mobile Platform Development'(MPD) OR 'Artificial Intelligence'. The MPD module is at level three which means that students selecting this as an elective must use all other fourth year modules in their honours calculation. Students are therefore advised of the ramifications of selecting the MPD module.

8. ASSESSMENT REGULATIONS

Students should expect to complete their programme of study under the Regulations that were in place at the commencement of their studies on that programme, unless proposed changes to University Regulations are advantageous to students.

The Glasgow Caledonian University Assessment Regulations which apply to this programme, dependent on year of entry can be found at:

[GCU Assessment Regulations](#)