

Programme specification

1. Overview/ factual information

Programme/award title(s)	BSc (Hons) Game Programming
Teaching Institution	Leeds City College
Awarding Institution	The Open University (OU)
Date of first OU validation	
Date of latest OU (re)validation	
Next revalidation	
Credit points for the award	120 for BSc (Hons)
UCAS Code	I621
HECoS Code	
LDCS Code (FE Colleges)	
Programme start date and cycle of starts if appropriate.	September 2022
Underpinning QAA subject benchmark(s)	Computing 2022
Other external and internal reference points used to inform programme outcomes. For apprenticeships, the standard or framework against which it will be delivered.	UK Quality Code for Higher Education (2018) Occupational Standard COGSQO-02 Analyse and Interpret Data in Science or Technology Related Industries https://www.ukstandards.org.uk/PublishedNos/Analyse-and-Interpret-Data-in-Science-or-Technology-Related-Industries-COGSQO-02.pdf
Professional/statutory recognition	None
For apprenticeships fully or partially integrated Assessment.	n/a
Mode(s) of Study (PT, FT, DL, Mix of DL & Face-to-Face) Apprenticeship	<i>Full-Time</i>
Duration of the programme for each mode of study	1 year Full-Time
Dual accreditation (if applicable)	n/a

Please note: 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 s/he 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 each module can be found in student module guide(s) and the students handbook.

The accuracy of the information contained in this document is reviewed by the University and may be verified by the Quality Assurance Agency for Higher Education.

2.1 Educational aims and objectives

The overall aims of the programme are to:

- Provide a comprehensive and challenging vocational programme in Game Programming, including core and specialist modules, which facilitate access and progression for a wide range of students from diverse backgrounds into various game programming pathways that lead into the relevant programming jobs.
- Provide the opportunity for level 5 students to complete a full degree in the specialist field of Game Programming, which is relevant to current practise within the Games Industry.
- Produce graduates who can critically reflect and learn from their practical and theory-based programming techniques in a game context and relate this experience to existing industry standard programming workflows/systems.
- Produce highly motivated individuals who continually develop their knowledge and skills across multiple programming languages and game engines.
- Produce graduates who have both subject specific skills (expressive, creative, technical) and transferable skills (communication, teamwork, project management and knowledge in multiple coding languages) which are key to being employable as a Programmer within the Games industry.
- Produce graduates with autonomous and problem-solving abilities relevant to Game Programming.
- Produce graduates who have an analytical and reflective understanding of Game Programming and wider digital subjects in the context of the workplace today and in relation to the wider social and cultural environment.
- Provide a wide range of opportunities to develop wider professional/soft skills and personal transferable skills so that after studies students may move directly into a programming role within the Computer Games Industry, such as Engine Programmer, Gameplay Programmer or Graphical programmer.

Date of production/revision of this specification

March 2022

2.2 Relationship to other programmes and awards

(Where the award is part of a hierarchy of awards/programmes, this section describes the articulation between them, opportunities for progression upon completion of the programme, and arrangements for bridging modules or induction)

The BSc (Hons) programme provides an internal progression opportunity for students on our Foundation Degree in Game Programming.

We would also accept external applicants who have level 5 qualifications such as Foundation Degrees, HNDs, or Diplomas of Higher Education in relevant subjects.

Our Foundation Degree in Game Programming includes modules such as Game Engine Utilisation, Principles of Programming, Advanced Programming, Introduction to AI, Emerging Technologies as well as Employability Skills and two project driven modules. Students joining the top-up course should have studied a variety of game programming focused modules at level 5.

Students will be assessed on their skills and experience during the application/interview process.

The level 6 induction sessions and the supportive design of initial modules such as Research Methods will ensure students progressing from other level 5 qualifications will encounter a smooth transition to level 6.

Completion of this Top-Up will support progression to Masters programmes.

The Top-Up has been designed to provide students with the skills needed to work in the digital industry, either employed or as a freelance practitioner.

The three Top-Up programmes: Game Development and Production, Game Art and Game Programming share some common modules. These modules are Research Methods, Team Project and Major Project. Even though Research and Major Project are shared these modules are contextualised to their own specialism. Allowing the students to focus on their area of expertise. Team Project is shared but this module is designed to choose to work across and with the different disciplines required for a Games team. This will not only broaden the skill are but also expand the nature of the student portfolio with the potential to increase employability options.

2.3 For Foundation Degrees, please list where the 60 credit work-related learning takes place. For apprenticeships an articulation of how the work based learning and academic content are organised with the award.

N/A

2.4 List of all exit awards

BSc. (Hons) Game Programming – 120 credits

BSc Game Programming - 60 credits

3. Programme structure and learning outcomes

(The structure for any part-time delivery should be presented separately in this section.)

Programme Structure - LEVEL 6					
Compulsory modules	Credit points	Optional modules	Credit points	Is module compensatable?	Semester runs in
Advanced Game Programming	20			Y	1
Research	20			Y	1
Applied Mathematics for Game Development	20			Y	2
Team Project	20			Y	2
Major Project	40			N	1 & 2

Intended learning outcomes at Level 6 are listed below:

Learning Outcomes – LEVEL 6	
3A. Knowledge and understanding	
Learning outcomes:	Learning and teaching strategy/ assessment methods
A1: Synthesise & critically appraise the relevant theories, concepts and principles applicable to game programming. A2: Demonstrate intellectual flexibility in relation to game programming. A3: Analyse and evaluate relevant ethical and legal issues.	Key Learning and Teaching Strategy Methods

<u>Learning Outcomes – LEVEL 6</u>	
3A. Knowledge and understanding	
<p>A4: Critically evaluate key aspects of a large-scale game programming project.</p>	<p>The programme will place strong emphasis on providing a solid practical experience which will enhance and embed theoretical knowledge allowing learners to develop valuable skills in addition to confident understanding. These practical skills development and lecture experiences will be supported by workshops and problem-based classes with provision of on-line guided learning and self-assessment.</p> <p>Subject-specific VLE areas that offer extension and support materials which can be accessed at any time by students with an internet connection.</p> <p>Students will use reflective activities for learning and development of advanced practical skills, such as experimental design and planning</p> <p>Group and individual presentations will be used to strengthen student learning and to provide a basis for industry-style assessment, developing employability skills.</p> <p>Lectures and seminars will include specialised speakers with research experience and invited industry specialists.</p>

<u>Learning Outcomes – LEVEL 6</u>	
3A. Knowledge and understanding	
	<p>Key Assessment Strategy/Methods</p> <p>Each module has both formative and summative assessment including early assessment to support transition</p> <p>All modules have assessment which divides the learning outcomes between two tasks so that achievement is balanced over two forms of assessment.</p> <p>All outcomes are assessed in a summative manner but supported with formative work in preparation such as practice questions or online quizzes or practical skills audits.</p> <p>Assessment guidelines have been followed in terms of the amount and extent of assessment with detailed attention to the workload that each piece places on the student.</p> <p>A variety of practical assessment methods are used including computer application practical, design exercises, programming exercises that work to provide a good experience in preparation for employment.</p>

<u>Learning Outcomes – LEVEL 6</u>	
3A. Knowledge and understanding	
	<p>A variety of theoretical assessment methods are used including oral presentations, written assessments - including technical reports, literature searches and surveys, presentations and essays. These methods will also place an emphasis on developing soft skills identified by employers.</p> <p>Feedback is delivered in a variety of ways including, written, online and verbal within appropriate time scales (immediate during laboratory work, moderated and within three weeks for summative work for example.</p> <p>Design of assessment wherever possible offers an experience similar to a possible work-based scenarios in industry.</p>
3B. Cognitive skills	
Learning outcomes:	Learning and teaching strategy/ assessment methods
<p>B1: Synthesise, appraise and evaluate data from appropriate sources to inform game development approaches.</p> <p>B2: Demonstrate intellectual flexibility and openness to new ideas, concepts & techniques pertinent to game programming.</p> <p>B3: Analyse and select appropriate game programming tools to solve complex problems.</p> <p>B4: Question current theories and methodologies using balanced, logical and supported arguments.</p>	<p>Various methods and strategies of theoretical assessment methods will be to develop and assess the developemnt of the required outcomes. These will include oral presentations, written assessments – including technical reports, literature searches,surveys, and presentations. Practical methods will also be used including practical application of tools, application development, design exercises, and programming exercises.</p>

3C. Practical and professional skills	
Learning outcomes:	Learning and teaching strategy/ assessment methods
<p>C1: Produce work that demonstrates advanced game programming skills.</p> <p>C2: Showcase an effective use of software skills relevant to game programming.</p> <p>C3: Select & use appropriate game programming techniques.</p> <p>C4: Employ a range of recognised pipelines when developing a game programming solution.</p>	<p>Assessment methods will include practical application design and development, appropriate application of tools, methods and techniques.</p> <p>Learning strategies will include lectures, presentations, reports, practical workshops and demonstrations.</p>
3D. Key/transferrable skills	
Learning outcomes:	Learning and teaching strategy/ assessment methods
<p>D1: Communicate clearly, fluently and effectively in a range of styles appropriate to the context.</p> <p>D2: Able to act autonomously with limited supervision or direction within agreed guidelines.</p> <p>D3: Engage with emerging technologies to develop approaches to continual self-development.</p> <p>D4: Demonstrate problem solving skills, innovation and independent thinking.</p>	<p>Various methods and strategies of learning and assessment will be employed to develop and assess the development of the required outcomes. These will include presentations, written assessments – including technical reports, literature searches, surveys, and oral presentations.</p>

Learning Outcomes BSc. (Hons) Game Programming

By the end of the programme successful students will have demonstrated all the above learning outcomes.

Learning Outcomes BSc. Game Programming



By the end of the programme, students awarded ordinary degrees will have completed 60 credits which are: Advanced Game Programming, Applied Mathematics for Game Development and Team Project. These students will have gained fewer credits at Level 6 than students awarded an Honours degree, and their knowledge will typically be less broad and will typically be less proficient in higher-level skills.

4. Distinctive features of the programme structure

- **Where applicable, this section provides details on distinctive features such as:**
 - where in the structure above a professional/placement year fits in and how it may affect progression
 - any restrictions regarding the availability of elective modules
 - where in the programme structure students must make a choice of pathway/route
- **Additional considerations for apprenticeships:**
 - how the delivery of the academic award fits in with the wider apprenticeship
 - the integration of the 'on the job' and 'off the job' training
 - how the academic award fits within the assessment of the apprenticeship

The newly formed STEM department is uniquely positioned to offer excellent opportunities to students on our programmes. The provision in the department includes Computing, Games, Engineering and Science programmes. This pack of courses offers exciting opportunities for collaborative work between students and staff.

The cross over between the different disciplines outlined are numerous. The aim of the programmes is to have cross collaboration across all levels. Examples of the opportunities are to have Games students work with computing students to develop and create fully working prototype games.

Games students can potentially work with science students to develop systems to analyse and interpret and present data and can visualise their data into a 3D format or a game-based scenario.

Each year there are opportunities to participate in Games Jam incorporated into Modules as well as the Global Game Jam. These Game Jams are vital for replicating workplace environment but to also allow a rapid development of ideas and showcase students' technical skills as well as their ability to work within a team.

Each Summer we run a series of activities, games, tournaments, game jams, technical showcases that is used to help keep current students engaged with the subject area and continue their development. This is also used to support upcoming students who are also invited to these games and competitions. This is used to help introduce students to our community early and meet tutors and students.

The Engineering industry are requiring more digital skills in manufacturing, automation and 3D product visualisations. Game tutors are fully skilled in the topics of 3D modelling and could port these skills into Computer Aided Design. Engineering staff could deliver Maths and Science based topics to Game students to add further context to their studies by developing a broad range of skills and knowledge in STEM subjects.

These staff skills and knowledge place the department in a unique position to deliver modern programmes that are reflective of industry needs and practices.

The focus of the programme is preparing students for a career in the games and digital sector, either as a self-employed practitioner or as an employee of an SME or large-scale company. There is an overall emphasis on work related learning that reflects industry practice. Work

related progression is the focus of most of the year. With the aim of developing professionalism and preparing graduates for the world of employment in the sector whilst developing soft skills and a portfolio for their interviews.

5. Support for students and their learning.

(For apprenticeships this should include details of how student learning is supported in the work place)

The award adopts the following approach to student learning support.

Tailored induction to support the transition to Higher Education

A robust communications system functions to give students access to lecturers and management; this includes e-mail, the VLE and notice boards and open office culture.

All necessary information about the programme is provided by means of the student handbook, module handbooks and the VLE.

Each student is allocated a personal tutor for regular tutorials and personal development planning. This is implemented in the first term and continued throughout the year of study.

Practical work supported by regular peer feedback through workshop critiques.

Shared documents and folders between staff and students to support live editing and feedback on work.

There is an extensive range of learning resources in the library, supported by specialist staff that provide bespoke study skills sessions for students.

The University Centre provides an extensive range of services for students, including support for those with special needs, welfare, counselling, financial and careers advice.

Students will be given a Chromebook or an equivalently priced laptop if they prefer when they start the course (if they haven't already received one at Level 4 at UCL).

The department has a coaching tutor employed to support students and their learning. The coaching tutor will provide support in academic, technical and personal settings. The coaching tutor will also support students with deadlines, applying for short extension and mitigation and will also track and chase low attendance and engagement.

Personal and academic tutorials will be carried out by the course team, these meetings will provide regular one to one support. Discussions will be logged and shared with module tutors to identify potential problems but to also highlight and share praise for excellent performance on module tasks.

The coaching tutor will act as the go to person for support. This will provide consistency for students with a clearly support staff who will get to know the students and their individual support needs

Dedicated 1 to 1 sessions are provided to support students with multiple technical issues, such as bug fixing and installation of software.

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6. Criteria for admission

(For apprenticeships this should include details of how the criteria will be used with employers who will be recruiting apprentices.)

	Typical offer	Minimum Offer
Foundation Degree:	50% module average on the second year of an FD in a relevant subject	An overall Pass grade (module average) on the second year of an FD in a relevant subject
HND:	Merit grade in a relevant subject	Pass grade in a relevant subject
IELTS:	IELTS 6.0 with no less than 5.5 in any component.	
International qualifications:	International qualifications will be assessed against these criteria	
Mature applicants:	Leeds City College welcomes applications from mature* applicants who may not have met the academic criteria, but who can demonstrate a wealth of experience in their chosen field. Candidates in this category and otherwise are likely to be interviewed to assess their suitability for the course and may be asked to provide a portfolio of evidence to support their application. <i>*21 years and over at the start of the course</i>	

7. Language of study

English

8. Information about non-OU standard assessment regulations (including PSRB requirements)

N/A

9. For apprenticeships in England End Point Assessment (EPA).

(Summary of the approved assessment plan and how the academic award fits within this and the EPA)

N/A

10. Methods for evaluating and improving the quality and standards of teaching and learning.

In addition to the Annual Programme Monitoring process the following mechanisms are in operation:

- Peer review
- Annual Planning
- Peer Observation
- Student module reviews
- Student voice
- Tutor module reviews
- Enrolment and induction reviews
- Course Committee meetings
- Pathway Committee meetings
- Student Pathway meeting
- Cross college quality and enhancement committee meeting
- Employer feedback

10. Changes made to the programme since last (re)validation

Annexe 1: Curriculum map

Annexe 2: Curriculum mapping against the apprenticeship standard or framework (delete if not required.)

Annexe 3: Notes on completing the OU programme specification template

Annexe 1 - Curriculum map

This table indicates which study units assume responsibility for delivering (shaded) and assessing (✓) particular programme learning outcomes.

Level	Study module/unit	Programme outcomes															
		A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3	D4
6	Research Methods	✓					✓		✓					✓	✓		
	Advanced Game Programming		✓		✓			✓		✓		✓				✓	
	Applied Mathematics for Game Development		✓			✓		✓				✓	✓				
	Team Project			✓		✓	✓				✓			✓			✓
	Major Project	✓		✓	✓				✓	✓	✓		✓		✓	✓	✓

Annexe 3 - Curriculum mapping against the apprenticeship standard

This table indicates which study units assume responsibility for delivering (shaded) and assessing (✓) particular knowledge, skills and behaviours.

Please ammend this mapping to suit Frameworks used within the different Nations if appropriate.

Level	Study module/unit	Apprenticeship standard																								
		K1	K2	K3	K4	K5	K6	K7	K8	S1	S2	S3	S4	S5	S6	S7	S8	B1	B2	B3	B4	B5	B6	B7	B8	
6																										

Annexe 2: Notes on completing programme specification templates

- 1 - This programme specification should be mapped against the learning outcomes detailed in module specifications.
- 2 – The expectations regarding student achievement and attributes described by the learning outcome in section 3 must be appropriate to the level of the award within the **QAA frameworks for HE qualifications**: <http://www.qaa.ac.uk/AssuringStandardsAndQuality/Pages/default.aspx>
- 3 – Learning outcomes must also reflect the detailed statements of graduate attributes set out in **QAA subject benchmark statements** that are relevant to the programme/award: <http://www.qaa.ac.uk/AssuringStandardsAndQuality/subject-guidance/Pages/Subject-benchmark-statements.aspx>
- 4 – In section 3, the learning and teaching methods deployed should enable the achievement of the full range of intended learning outcomes. Similarly, the choice of assessment methods in section 3 should enable students to demonstrate the achievement of related learning outcomes. Overall, assessment should cover the full range of learning outcomes.
- 5 - Where the programme contains validated **exit awards** (e.g. CertHE, DipHE, PGDip), learning outcomes must be clearly specified for each award.
- 6 - For programmes with distinctive study **routes or pathways** the specific rationale and learning outcomes for each route must be provided.
- 7 – Validated programmes delivered in **languages other than English** must have programme specifications both in English and the language of delivery.