

# **BSc (Hons) Games Programming; BSc (Hons) Games Programming with Work Experience**

## Programme Specification

**Awarding Institution:**

University of London (Interim Exit Awards made by Goldsmiths' College)

**Teaching Institution:** Goldsmiths, University of London**Name of Final Award and Programme Title:**

BSc (Hons) Games Programming

BSc (Hons) Games Programming with Work Experience

**Name of Interim Exit Award(s):**

Certificate of Higher Education in Games Programming

Diploma of Higher Education in Games Programming

**Duration of Programme:**

3 years full-time or 6 years part-time (BSc (Hons) Games Programming)

4 years full-time (BSc (Hons) Games Programming with Work Experience)

**UCAS Code(s):** I610**HECoS Code(s):** (101020) Computer Games Programming**QAA Benchmark Group:** Computing**FHEQ Level of Award:** Level 6**Programme accredited by:** Not applicable**Date Programme Specification last updated/approved:** December 2019**Home Department:** Computing**Department(s) which will also be involved in teaching part of the programme:**

Not applicable

## **Programme overview**

This programme is designed to prepare students for a career as a programmer in the video games industry.

The games industry is a competitive industry for graduates and one that involves some of the most technically challenging programming problems. This degree will equip students with the rigorous programming skills they need to succeed. As well as a technical industry it is also a creative industry that requires constant innovation and understanding of art and design skills. Our approach at Goldsmiths emphasises creative side of programming and

how programming relates to the creative aspects of game development. Most importantly of all, from the very beginning, students will be developing games in an environment that mirrors as closely as possible industry working practices. This will give you the experience you need as well as helping you develop a portfolio of work to present to potential employers.

## **Programme entry requirements**

You will be expected to have at least BBB at A2 level, or equivalent.

An A2 level qualification, or equivalent, relating to science, technology and mathematics is preferred. However, we encourage applications from those without a formal qualification in these areas who can demonstrate relevant knowledge, skills and experience.

All applicants may be called for an interview; at which time they may be asked to take a computer aptitude test. Applicants should ideally have a grade B in GCSE Mathematics, or equivalent.

Applicants whose first language is not English must have received a score of 6.0 or more in the IELTS (or equivalent) examination for written English.

## **Aims of the programme**

The aim of this programme is to produce graduates who are independent, creative and reflective practitioners of games programming. Our graduates should have:

- Knowledge of games programming across a range of core and specialist topics
- Understanding of the contexts in which games programming subsist in industry, with an emphasis on the creative industries
- The ability to design and implement software systems
- The ability to work independently and in groups and reflectively evaluate their own work

The term computing applies to an increasingly diverse set of degree courses all based on the foundations of computer science. It is widely taught in joint and interdisciplinary courses. The content of this degree as set out in this specification approximate to a synthesis of elements from “Software Engineering” and “Information technology” as defined in the QAA Computing benchmark statement. There currently is not an appropriate benchmarking statement to draw from with regards to the Game Design component of the programme.

## What you will be expected to achieve

Students graduating with only a **Certificate of Higher Education** in Games Programming must achieve the following learning outcomes at a basic level, but are not required to achieve them at a professional level

### Knowledge and understanding

Code	Learning outcome	Taught by the following module(s)
A1	Basic knowledge of a programming language and its features	This will primarily be taught in the 1st year programming modules via lectures and programming exercises. It will be assessed in via an examination.
A2	Knowledge of contemporary and historical and the creative and technical approaches they have taken	This will be taught in the first year Introduction to Games Design & Development and Games Development Games Project modules via seminar sessions and independent research for their projects. Assessment will be via project reports.
A3	Knowledge of contemporary games development practice	This will be taught in the first year Introduction to Games Design & Development module and Games Project module. Students will undertake a project in an environment that mirrors professional practice. Assessment will be via project reports.
A4	The mathematical and computational principles underlying games development	This will be taught in the Numerical and Symbolic Mathematics modules. Teaching will be via lectures and practical work. Assessment will be via practical coursework and exams.

### Cognitive and thinking skills

Code	Learning outcome	Taught by the following module(s)
B1	Computational Problem solving	This will primarily be taught in the 1st year programming modules. Teaching will be via problem solving

Code	Learning outcome	Taught by the following module(s)
		and programming exercises and assessment will be via practical programming coursework and examination. This skill will be applied across the programme.
B2	Awareness and analysis of creative work within the games industry to the standards of academic study.	This will be taught in the first year Introduction to Games Design & Development module.
B3	Program computer software	This will be taught in the 1st year programming modules and applied across the curriculum.
B4	Develop playable and compelling video games.	This will be taught in the first year Introduction to Games Design & Development module.

### Subject specific skills and professional behaviours and attitudes

Code	Learning outcome	Taught by the following module(s)
C1	Program computer software	This will be taught in the 1st year programming modules and applied across the curriculum and in particular in the final year project
C2	Develop playable and compelling video games.	This will be taught in the first year Introduction to Games Design & Development module.

### Transferable skills

Code	Learning outcome	Taught by the following module(s)
D1	Have core numeracy, literacy and IT skills to a graduate level.	Numeracy and IT skills are core to a games programming degree and will feature throughout the curriculum.
D2	Be able to effectively present themselves and their work orally and in writing to a professional level	Assessment throughout the programme will include considerable written and oral presentation.

The **Diploma of Higher Education** in Games Programming includes all learning outcomes of the Certificate of Higher Education in Games Programming. Students graduating with a Diploma of Higher Education in Games Programming must achieve the learning outcomes of the Certificate of Higher Education in Games Programming to higher level characterised by greater breadth and depth of knowledge, greater independence in practical work and

more critical skills in evaluation and analysis. In addition, the Diploma of Higher Education in Games Programming includes the learning outcomes listed below. Learning outcomes of the Diploma in Higher Education in Games Programming should be achieved to the level of academic study or professional practice, within limited domains.

## Knowledge and understanding

Code	Learning outcome	Taught by the following module(s)
A1	A range of topics in Games Programming including web technologies, multimedia, networking, data bases and a number of more advanced topics. Knowledge of most will be sufficient to apply to moderately complex application; some will be studied in greater depth.	A range of specialist modules. Teaching will be via lectures and practical lab work. Assessment will be via examinations and practical coursework
A2	Programming languages, their features and the differences between languages. Knowledge will be sufficient for professional level software development.	This will primarily be taught in the 1st and 2nd year programming modules. Other modules will teach alternative languages and compare them to our core languages. Teaching will be via lectures and practical programming work. Assessment will be via examinations and written reports on practical programming course work.

## Cognitive and thinking skills

Code	Learning outcome	Taught by the following module(s)
B1	Apply computational thinking to the design and implementation of moderately complex computing systems	This will primarily be taught in the 1st and 2nd year programming modules. This skill will be applied across the programme but particularly in Games Project 2. Students will learn these skills primarily through guided practical work in lab settings and will be assessed via practical programming course work and projects.
B2	Analyse and evaluate moderately complex computing systems and technologies with reference to efficiency, correctness and suitability to users' needs	This will be taught across the curriculum, but primarily in the programming modules, Game Development Group Project.

Code	Learning outcome	Taught by the following module(s)
		Students will learn these skills primarily through guided practical work in lab settings and independent project work. They will be assessed via practical programming course work and projects.

## Subject specific skills and professional behaviours and attitudes

Code	Learning outcome	Taught by the following module(s)
C1	Specify, design and implement a complete computer game or piece of game middle ware with reference to user requirements	This will be taught in the Games Projects. Students will have lectures guiding them through the process of requirements specification, design and implementation. They will also undertake the process in practice during their projects. Assessments will be via project reports and presentations.
C2	Apply specific technologies, methods and tools to the analysis, design and implementation of software. Some technologies will be known to a basic level and others in greater depth.	Students will do practical lab work and coursework applying these technologies in a number of contexts. They will be assessed via practical coursework.

## Transferable skills

Code	Learning outcome	Taught by the following module(s)
D1	Be able to reflect on and evaluate their work	Students will be required to maintain a web page on which they will engage in reflective discussion of their work. The modules Introduction to Games Design & Development and Games Project 2 will have specific learning outcomes on reflection and self-evaluation.
D2	Work in teams to plan and execute a large scale project.	The Games Project 2 requires students to work in teams on a large scale project. This will be evaluated via the final and interim project reports and presentations.

The BSc Honours includes all learning outcomes of the Diploma of Higher Education in Games Programming. The learning outcomes must be achieved to a higher level characterised by greater specialist knowledge and skills as well as greater independence of thought and practical work. All learning outcomes should be achieved to the level of professional practice within the games industry and knowledge and thinking skills should be achieved to the level of academic practice. As well as the learning outcomes for the Diploma of Higher Education the BSc Honours has the following outcomes.

## Knowledge and understanding

Code	Learning outcome	Taught by the following module(s)
A1	A wide range of specialist topics in Games Programming including web technologies, multimedia, networking, data bases and a number of more advanced topics. Knowledge of most will be sufficient to apply to moderately complex application; some will be studied in greater depth.	3rd year options. Teaching will be via lectures and practical work. Assessment will be via coursework and examinations.

## Cognitive and thinking skills

Code	Learning outcome	Taught by the following module(s)
B1	Propose, plan and evaluate a significant piece of project work, under supervision of an expert.	Final year project module

## Subject specific skills and professional behaviours and attitudes

Code	Learning outcome	Taught by the following module(s)
C1	Execute a significant piece of creative work, under supervision of an expert.	Final year project module

## Transferable skills

Code	Learning outcome	Taught by the following module(s)
D1	Work independently to plan and execute a large scale project.	The Final Project requires students to work on a large scale project. This will be evaluated via the final project report and presentation.

The above learning outcomes are in concurrence with typical learning outcomes for Computing degrees as identified by the QAA subject benchmark.

## **How you will learn**

### Core technical Computing

The Department of Computing is committed to a diverse and stimulating range of learning and teaching methods that ensure the programme outcomes are addressed rigorously and effectively. Learning emphasises a close synthesis between theoretical understanding and practical application that helps you develop an advanced, critical approach to the subject of computing. In addition, the College's Gold Award scheme and personal tutoring system are opportunities to develop coherent links between seemingly disparate elements in the programme.

The various modules of the programme provide a diverse range of topics across the scope of Games Programming but are designed to form a coherent and cumulative body of knowledge and skills. These are further developed through your independent research and learning activities directed towards course assignments and the large-scale project component. The department is committed to providing a diverse and innovative range of teaching styles across its degree programmes. These include traditional lecture and laboratory sessions but also a range of more interactive and self-directed activities focusing on independent, creative work and self-presentation. The nature of the learning activities will vary greatly between different modules, but includes programming, building hardware devices, software design, project planning, group activity and creative work. In addition students will be expected to engage in considerable independent reading and practical work for all modules culminating in the final year project. This independent work will be supported by library resources, access to lab space and supervision from teaching staff.

The programme provides a range of modules which provide a network of cross-referenced and cumulative knowledge across diverse areas of Games Programming. You achieve the outcomes relevant to your individual pathway that combines compulsory and optional modules, through the experience of interconnected teaching and learning strategies across the various elements of the programme. All modules provide a weekly lecture-lab or other session, which reinforces preparatory or follow-up reading, and other related learning activities in both group and individual settings to foster new understandings and skills.

## **How you will be assessed**

The department recognises that high quality assessment is a vital part of learning, particularly when used formatively, providing valuable feedback for future learning. Our

assessment is designed to reflect “real world” skills and activity in order to give our students a strong preparation for the work place.

No single method of assessment can capture all aspects of Games Programming or the full range of skills required by our graduates. For this reason, we are committed to providing many diverse styles of assessment and to the development and use of novel forms of assessment. Our methods of assessment are designed to reflect business relevant activities and to encourage independent, creative work. As well as traditional examinations, our assessment includes many different types of “hands on” practical work including software development, business planning and group work. Students will be required to present their work in a number of different ways that reflect the contemporary work place, including traditional reports but also oral presentations and extensive use of the web for self-presentation. Above all we encourage our students to be independent and creative thinkers and include considerable opportunities for open ended assessments that allow students to develop their own ideas.

Feedback is vital to effective continuing learning, the true value of assessment is that it shows students how to improve their work and learn more effectively in future. For this reason, we are committed to providing timely and full feedback on all assessed assignments.

Throughout the degree programme assessment will happen in individual modules, each having assignments, each including some of the many diverse styles of assessment listed above, as well as end of year exams for some modules. As well as these small assignments, students will have a major project in their final year. This is a large scale piece of work which should integrate what students have learned throughout the programme. It provides students with an opportunity to independently tackle a large project that reflects real world software development. There are many different types of project, but all including the implementation of a substantial software system and a written report.

Assessments are expected to make up roughly half of the workload of a taught module. A 15 credit module corresponds to 150 hours of work. Roughly 80 hours of this should be taken up with assessed coursework and examinations (including revision). The remainder is made up of 40 hours of contact time and a further 30 hours of private study.

Below is a list of the major types of assessment used in the department. Individual modules may vary slightly

### Practical Coursework

Most of our modules will include an element of practical coursework that includes programming or otherwise creating a software system based on the material presented in the module. You will work independently, with an opportunity to ask for help in lab sessions.

You will submit the finished software together with a written report or other type of documentation (oral presentation, web site, in code comments etc.). The assessment of coursework may also involve an oral examination, typically of a random selection of student or where there is suspicion of plagiarism. A 15 credit module will typically have 1 coursework and a 30 credit module will have 2.

There are five main types of coursework that we set, though individual modules may differ slightly.

**Practical Coursework** (worth up to 40% of a 15 credit module). This will involve answering a number of specific questions that involve either creating software or hardware from scratch or editing existing software. It will typically include a report of 1-2000 words or equivalent documentation and require about 30 hours of work.

**Extended Practical Coursework** (worth between 40% and 80% of a 15 credit module). This will involve answering a number of specific questions that involve either creating software or hardware from scratch or editing existing software. The work involved will be more substantial than a normal coursework and will also include scope for extending that software in ways that you choose. It will typically include a report of about 3000 words or equivalent documentation and require about 50 hours of work.

**Mini-project** (worth between 80% and 100% of a 15 credit module). This will involve creating a substantial software system either partially or completely of your own design. It may also involve some formative working similar to a practical coursework. It will typically include a report of about 6000 words or equivalent documentation and require about 80 hours of work.

**Group project** (worth between 80% and 100% of a 15 credit module). This will involve creating a substantial software system in a collaboration with a group of other students. The group will submit the completed software, and each individual will write a report of about 5000 words discussing their own contribution to the software and the working of the group. Your mark will be based on the success of the project as a whole and also your contribution to it. It will typically require about 80 hours of work.

**Examined Coursework** (worth 100% of a 15 credit module). Some of our modules will involve a number of practical courseworks or extended practical courseworks that are either partially or completely assessed by a written examination. This examination will consist of questions relating specifically to the coursework.

## Written Coursework

Coursework may also take the form of a written essay. This will involve applying the ideas presented in the module and doing independent research or problem solving. There are four types of written coursework that we may set.

Written Problem Sheet (worth up to 40% of a 15 credit module). This will involve written answer to a set of clearly defined mathematical or technical questions. They will typically require about 30 hours of work.

Essay (worth up to 40% of a 15 credit module). This will involve writing in answer to a question about a clearly defined topic. It will typically be about 3000 words and require about 30 hours of work.

Extended Essay (worth between 40% and 80% of a 15 credit module). This will involve writing in answer to a question about a clearly defined topic, but with more scope for independent research and choice of topic. It will typically be about 6000 words and require about 50 hours of work.

Mini-dissertation (worth between 80% and 100% of a 15 credit module). This will involve extensive independent research on a topic that is at least partially defined by you, within the scope of the module. It will typically be about 10000 words and require about 80 hours of work.

## Examinations

The purpose of examinations is to test your understanding and work under timed, controlled conditions. Examinations will consist of a number of questions that you will have to answer in a limited time. They will be held in an examination hall in silence. A typical exam for a 15 credit (1 term) module will be 1 hour 30 minutes long and consist of 3 questions with no choice, for a 30 credit (2 term) module it will be 3 hours and consist of 6 questions with no choice. Individual modules may have different examination arrangements. Typically, you will not be allowed, notes, books or any internet access, though individual exams may allow access to certain books or web sites.

There are four major types of examination used in the department:

Written Examinations. These examinations consist of a number of questions to be answered in writing. Typically, this will be hand written on exam scripts provided.

Practical Examinations. These examinations will consist of a number of practical questions whose answers require programming or otherwise creative software systems. These examinations will be held in a computer laboratory with no internet access.

Mixed Written/Practical Examinations. These examinations will consist of both written and practical questions. These examinations will be held in a computer laboratory with no internet access.

Coursework Examinations. These are written examinations where the questions are specifically about practical coursework that you will have done during the module (see above).

These methods of assessments are in concurrence with the QAA subject benchmark statement.

## Marking criteria

Mark	Descriptor	Specific Marking Criteria
80-100%	1st: First (Exceptional)	Represents an exceptional achievement beyond the standard requirements of a first class degree. Students' work should demonstrate considerable creative thought and be based on a critical evaluation of prior work. Work is likely to achieve some outcomes that would be expected at a higher level degree.
70-79%	1st: First (Excellent)	Represents an excellent overall achievement of the appropriate learning outcomes. Students at this level would be well prepared for a relatively advanced job programming in the games or software industry or for post-graduate study. Demonstration of an excellent grasp of relevant concepts, methodology and content appropriate to the subject discipline; indication of originality in application of ideas, in synthesis of material or in implementation; insight reflects depth and confidence of understanding of the material. Students should be able to design and create computer systems that demonstrate considerable independent thought and are based on independent learning of prior work and existing technologies. Students should be able to critically evaluate their own work and that of others. Presentation of complex material orally and in writing that includes considerable independent research and a critical evaluation of the work of others. A confident understanding of material presented in class combined with considerable independent research into more challenging topics. Solving difficult problems that involve independent thought and considerable creativity and ingenuity. Work that displays considerable Independence and creativity.

<b>Mark</b>	<b>Descriptor</b>	<b>Specific Marking Criteria</b>
60-69%	2.1: Upper Second (Very good)	Represents a very good overall achievement of the appropriate learning outcomes. Students at this level would be well prepared for an entry- level job programming in the games or software industry or for post-graduate study. Demonstration of a very good level of understanding based on a competent grasp of relevant concepts, methodology and content; display of skill in interpreting complex material; organisation of material at a high level of competence. Students should be able to demonstrate: the ability to independently design, implement and evaluate a high quality and complex computer systems using knowledge from across the programme. Presentation of a coherent argument orally and in writing to a proper academic standard including some independent research which is properly referenced. A clear understanding of the material covered in the module as well as an exploration of some material beyond what is presented in class Solving a challenging problems. Work that presents an independent voice or viewpoint and a degree of independent creativity.
50-59%	2.2: Lower Second (Good)	Represents a good overall achievement of the appropriate learning outcomes. Students at this level would be ready for a basic entry-level job programming in the software or games industry. Demonstration of a good level of understanding of relevant concepts, methodology and content; display of sufficient skill to tackle some complex problems; appropriate organisation of material. Students should demonstrate: the ability to create complex computer software, making use of prior knowledge and material taught within the programme. Presentation of material orally and in writing to a proper academic standard including references. A clear understanding of the material covered in the module. Solving a range of problems. Produced competent work based on material presented in class.
40-49%	3rd: Third (Pass)	Represents the overall achievement of the appropriate learning outcomes to a threshold level (honours). Students at this level would have the skills and understanding to work with programmers in the games or software industries but not necessarily ready for work as professional programmers. Demonstration of an adequate level of understanding of relevant concepts, methodology and content; clear if limited

Mark	Descriptor	Specific Marking Criteria
		<p>attempt to tackle problems; display of some skill in organisation of material. Students should demonstrate:</p> <ul style="list-style-type: none"> <li>• Creation of a basic, complete and working Games Program.</li> <li>• Presentation of basic material orally and in writing</li> </ul> <p>Understanding of the basic material covered in the module.</p>
25-39%	Fail	<p>Represents an overall failure to achieve the appropriate learning outcomes to an appropriate level. At this level students would be: creating Games Programs that fail to work correctly or fail to have an appropriate level of functionality. Presentation work orally and in writing that fails to appropriately communicate the relevant concepts. Understanding of very limited parts the material covered in the module. Failing to solve simple problems even with guidance from tutors.</p>
10-24%	Bad fail	<p>Represents a significant overall failure to achieve the appropriate learning outcomes (shall be deemed a valid attempt and not necessarily required to be re-sat).</p>
1-9%	Very bad fail	<p>A submission that does not even attempt to address the specified learning outcomes (shall be deemed a non valid attempt and must be re-sat).</p>
0%	Non submission or plagiarised	<p>Work was not submitted or it was plagiarised</p>

## How the programme is structured

An undergraduate honours degree is made up of 360 credits – 120 at Level 4, 120 at Level 5 and 120 at Level 6. As a full-time student, you will usually take Level 4 modules in the first year, Level 5 in the second, and Level 6 modules in your final year. A standard module is worth 30 credits. Some programmes also contain 15-credit modules or can be made up of higher-value parts, such as a dissertation.

## Full-time mode (BSc (Hons) Games Programming and BSc (Hons) Games Programming with Work Experience)

### Academic year of study 1 (both programmes)

Module Title	Module Code	Credits	Level	Module Status	Term
Introduction to Programming	IS51031A	15	4	Compulsory	1
Generative Drawing	IS51028A	15	4	Compulsory	2
Numerical Mathematics	IS51026B	15	4	Compulsory	1
Symbolic Mathematics	IS51032A	15	4	Compulsory	2
Graphics 1	IS51030A	15	4	Compulsory	2
Front End Web	IS51018B	15	4	Compulsory	1
Introduction to Games Design & Development	IS51XXXX	15	4	Compulsory	1
Games Project 1	IS51XXXX	15	4	Compulsory	2

### Academic year of study 2 (both programmes)

Module Title	Module Code	Credits	Level	Module Status	Term
C++ for Creative Practice	IS52XXXX	15	5	Compulsory	1
Algorithms 1	IS52XXXX	15	5	Compulsory	1
Perception and Multimedia Computing	IS52XXXX	15	5	Compulsory	1
Games Project 2	IS52018E	30	5	Compulsory	1,2
Physical Computing	IS53030B	15	5/6	Optional	2
Graphics 2	IS52XXXX	15	5/6	Optional	2
Extended C++	IS52XXXX	15	5	Optional	2
Algorithms 2	IS52XXXX	15	5	Optional	2

### Academic year of study 3 for BSc Games Programming with Work Experience only

Module Title	Module Code	Credits	Level	Module Status	Term
Work Placement	IS53031A	0	6	Compulsory	1-3

### Academic year of study 3 for BSc Games Programming (and 4 for BSc Games Programming with Work Experience)

Module Title	Module Code	Credits	Level	Module Status	Term
Final Project in Games Programming	IS53007C	60	6	Compulsory	1-3

Module Title	Module Code	Credits	Level	Module Status	Term
Expressive Games Development	IS53059A	15	6	Compulsory	1 or 2
Optional modules from a list of approved modules available annually	Various	45	6	Optional	1,2

## Part-time mode (BSc (Hons) Games Programming only)

### Academic Year of Study 1

Module Title	Module Code	Credits	Level	Module Status	Term
Introduction to Programming	IS51008D	15	4	Compulsory	1
Symbolic Mathematics	IS51032A	15	4	Compulsory	2
Introduction to Games Design & Development	IS51XXXX	15	4	Compulsory	1
Front End Web	IS51018B	15	4	Compulsory	1

### Academic Year of Study 2

Module Title	Module Code	Credits	Level	Module Status	Term
Generative Drawing	IS51028A	15	4	Compulsory	2
Numerical Mathematics	IS51026B	15	4	Compulsory	1
Graphics 1	IS51030A	15	4	Compulsory	2
Games Project 1	IS51XXXX	15	4	Compulsory	2

### Academic Year of Study 3

Module Title	Module Code	Credits	Level	Module Status	Term
C++ for Creative Practice	IS52XXXX	15	5	Compulsory	1
Algorithms 1	IS52XXXX	15	5	Compulsory	1
Perception and Multimedia Computing	IS52XXXX	15	5	Compulsory	1

### Academic Year of Study 4

Module Title	Module Code	Credits	Level	Module Status	Term
Perception and Multimedia Computing	IS52XXXX	15	5	Compulsory	1
Games Project 2	IS52018E	30	5	Compulsory	1,2
Physical Computing	tbc	15	5/6	Optional	2

Module Title	Module Code	Credits	Level	Module Status	Term
Graphics 2	IS52XXXX	15	5/6	Optional	2
Extended C++	IS5XXXX	15	5	Optional	2
Algorithms 2	IS5XXXX	15	5	Optional	2
Games Project 2	IS52018E	30	5	Compulsory	1,2
Physical Computing	IS53030B	15	5/6	Optional	2
Graphics 2	IS52XXXX	15	5/6	Optional	2
Extended C++	IS5XXXX	15	5	Optional	2
Algorithms 2	IS5XXXX	15	5	Optional	2

## Academic Year of Study 5

Module Title	Module Code	Credits	Level	Module Status	Term
Expressive Game Design	IS53059A	15	6	Compulsory	1,2
Modules from a list of approved modules available annually	Various	45	6	Optional	1,2

## Academic Year of Study 6

Module Title	Module Code	Credits	Level	Module Status	Term
Final Project in Games Programming	IS53007C	60	6	Compulsory	1-3

## Academic support

Support for learning and wellbeing is provided in a number of ways by departments and College support services who work collaboratively to ensure students get the right help to reach their best potential both academically and personally.

All students are allocated a Personal Tutor (one in each department for joint programmes) who has overall responsibility for their individual progress and welfare. Personal Tutors meet with their student at least twice a year either face-to-face, as part of a group and/or electronically. The first meeting normally takes place within the first few weeks of the autumn term. Personal Tutors are also available to students throughout the year of study. These meetings aim to discuss progress on modules, discussion of the academic discipline and reports from previous years if available (for continuing students). This provides an opportunity for progress, attendance and assessment marks to be reviewed and an informed discussion to take place about how to strengthen individual learning and success.

All students are also allocated a Senior Tutor to enable them to speak to an experienced academic member of staff about any issues which are negatively impacting their academic study and which are beyond the normal scope of issues handled by Programme Convenors and Personal Tutors.

Students are provided with information about learning resources, the [Library](#) and information available on [Learn.gold \(VLE\)](#) so that they have access to department/programme handbooks, programme information and support related information and guidance.

Taught sessions and lectures provide overviews of themes, which students are encouraged to complement with intensive reading for presentation and discussion with peers at seminars. Assessments build on lectures and seminars so students are expected to attend all taught sessions to build knowledge and their own understanding of their chosen discipline.

All assessed work is accompanied by some form of feedback to ensure that students' work is on the right track. It may come in a variety of forms ranging from written comments on a marked essay to oral and written feedback on developing projects and practice as they attend workshops.

Students may be referred to specialist student services by department staff or they may access support services independently. Information about support services is provided on the [Goldsmiths website](#) and for new students through new starter information and induction/Welcome Week. Any support recommendations that are made are agreed with the student and communicated to the department so that adjustments to learning and teaching are able to be implemented at a department level and students can be reassured that arrangements are in place. Opportunities are provided for students to review their support arrangements should their circumstances change. The [Disability](#) and [Wellbeing](#) Services maintain caseloads of students and provide on-going support.

The [Careers Service](#) provides central support for skills enhancement, running [The Gold Award](#) scheme and other co-curricular activities that are accredited via the Higher Education Achievement Report ([HEAR](#)).

The [Academic Skills Centre](#) works with academic departments offering bespoke academic literacy sessions. It also provides a programme of academic skills workshops and one-to-one provision for students throughout the year.

## Links with employers, placement opportunities and career prospects

This programme aims to prepare students for a career programming in the games industry. Students would be able to take on jobs in many sectors in the games industry such as mobile games, casual game, social media games, and for the most successful students, AAA console game development. Students would also be able to progress to masters level study in games programming or games art and design, which are established routes into high profile game development studios. The skills taught in the module are also applicable in other areas of games programming such as mainstream programming jobs, mobile app development or web development.

## The requirements of a Goldsmiths degree

Undergraduate degrees have a minimum total value of 360 credits. Some programmes may include a year abroad or placement year and this may be reflected in a higher total credit value. Programmes are composed of individual modules, each of which has its own credit value. Full-time students take modules to the value of 120 credits each year and part-time students not less than 45 credits and not more than 90 credits each year. If a programme has a part-time pathway, the structure will be set out in the section “How the programme is structured” above. Each full-time year corresponds to a level of the Framework for Higher Education Qualifications (FHEQ), as follows:

Year 1 = Level 4

Year 2 = Level 5

Year 3 = Level 6

More detailed information about the structure and requirements of a Goldsmiths degree is provided in the [Goldsmiths Qualifications and Credit Framework](#).

## Modules

Modules are defined as:

- “Optional” – which can be chosen from a group of modules
- “Compulsory” – which must be taken as part of the degree
- “Compulsory (Non-compensatable)” – Some compulsory modules are central to the achievement of a programme’s learning outcomes. These are designated as “Non-compensatable” for that programme and must therefore be passed with a mark of at least 40% in order to pass the module.

## Progression

Full-time students are required to have passed modules to a minimum of 90 credits before proceeding to the next year. Part-time students must normally pass new modules to a minimum value of 45 credits before proceeding to the next year.

In addition, some programmes may specify particular modules which must be passed, irrespective of the minimum requirements, before proceeding to the next year.

## Award of the degree

In order to graduate with a classified degree, students must successfully complete modules to the minimum value of 360 credits, as set out within the section “The requirements of a Goldsmiths degree” above. A failed module with a mark of 35-39% may be compensated (treated as if it has been passed) so long as the average mean mark for all 120 credits at that level is 45% or above and the module has not been defined as “Non-compensatable”. No more than 60 credits may be compensated this way across a programme and no more than 30 credits at any one level.

## Classification

Final degree classification will usually be calculated on the basis of a student's best marks for modules equivalent to 90 credits at Level 4, 105 credits at level 5 and 105 credits at level 6, applying a relative weighting of 1:3:5 to modules at level 4, 5 and 6 respectively.

Degrees are awarded with the following classifications:

- 1st: First Class – 70%+
- 2.1: Upper Second – 60-69%
- 2.2: Lower Second – 50-59%
- 3rd: Third – 40-49%

Students who, following the application of compensation and having used all their permitted resit attempts, have passed modules to the value of 300-345 credits, at least 60 of which are at level 6 may be awarded a pass degree.

More detail on the [calculation of the final classification](#) is on our website.

## Interim exit awards

Some programmes incorporate interim exit points of Certificate of Higher Education and/or Diploma of Higher Education, which may be awarded on the successful completion of

modules to the value of 120 credits at level 4 or 240 credits (120 of which at level 5) respectively. The awards are made without classification.

When these awards are incorporated within the programme, the relevant learning outcomes and module requirements will be set out within the “What you will be expected to achieve” section above.

The above information is intended as a guide, with more detailed information available in the [Goldsmiths Academic Manual](#).

## **Programme-specific rules and facts**

### **General programme costs**

In addition to your tuition fees, you will be responsible for meeting standard costs associated with your study. Find out more information at [gold.ac.uk/programme-costs](http://gold.ac.uk/programme-costs).

### **Specific programme costs**

Not applicable.

## **How teaching quality will be monitored**

Goldsmiths employs a number of methods to ensure and enhance the quality of learning and teaching on its programmes.

Programmes and modules are formally approved against national standards and are monitored throughout the year, such as in departmental committees, a variety of student feedback mechanisms and through the completion of module evaluation questionnaires. Every programme has at least one External Examiner who reviews comments annually on the standards of awards and student achievement. External Examiner(s) attend Boards of Examiners meetings and submit an annual written report.

Modules, programmes and/or departments are also subject to annual and periodic review internally, as well as periodic external scrutiny.

Quality assurance processes aim to ensure Goldsmiths’ academic provision remains current, that the procedures to maintain the standards of the awards are working effectively and the quality of the learning opportunities and information provided to students and applicants is appropriate.

Detailed information on all these procedures are published on the [Quality Office web pages](#).