



# Programme Specification 2022–2023

Computer Science  
(and specialisms)

BSc  
Graduate Diploma  
Graduate Certificate

Important document – please read

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## Important information regarding the Programme Specification

### About this document

Last revised : 21 November 2022

The Programme Specification gives a broad outline of the structure and content of the programme, the entry level qualifications, as well as the learning outcomes students will achieve as they progress. Some of the info 59520RG [( )0.00007ps









Academic direction

Goldsmiths, University of London

Accreditation by professional or statutory body

Not applicable

Language of study and assessment

English

Mode of study

Web supported learning with an online tutor or institution supported learning from a local institution, where this is available. Institutions which support this programme will be listed on the [Institutions Directory](#).

BSc Programme structures

The programme will have two registration points in the year corresponding with start dates for modules.

The BSc Computer Science programme is a 360 UK credit degree.

For the award of a BSc Computer Science a student must complete:

- x one 15 credit core module and seven 15 credit compulsory modules at FHEQ Level 4 (120 credits), plus

- x eight 15 credit compulsory modules at FHEQ Level 5 (120 credits), plus

- x six 15 credit optional modules (and) TJ ET Q q 0.000008871 0 595.32 841.92 re .32p304 Tf 1 0 0 1 169.94 386



- x three 15 credit core modules, plus
- x three 15 credit compulsory modules, plus
- x a 30 credit project

The Graduate Certificate programme is a 60 UK credit degree, including 45 credits at FHEQ Level 6. For the award of a Graduate Certificate a student must complete:

- x three 15 credit core modules, plus
- x one 15 credit compulsory module

### BSc Maximum and minimum periods of registration

The BSc, via the Direct Entry Route, can be completed in a minimum of three years, subject to module availability. However, students may take up to six years.

Students entering via Performance Based Admissions will have a maximum of three years to complete the two modules required for admission to the full programme. The six-year registration period will begin from the point at which they register on the full BSc.

This is a flexible programme which allows students to study at their own pace (either part-time or full-time), adjusting the intensity of the learning to suit their needs. Students that wish to complete the programme within 3 years are advised to register on 4 modules per term.

### Graduate Diploma and Graduate Certificate maximum and minimum periods of registration

The maximum and minimum periods of registration, from a student's first registration, are as follows:

- x The Graduate Diploma can be completed in a minimum of one year, subject to module availability, however students may also take up to five years.
- x The Graduate Certificate can be completed in a minimum of six months, subject to module availability, however students may take up to five years.



x satisfy







x Demonstrate a

- x Demonstrate a sound understanding of all the main areas of Machine Learning and AI and also demonstrate the ability to exercise critical judgement in the evaluation of Machine Learning and AI applications;
- x Apply a critical understanding of essential concepts, principles and practices of Machine Learning and AI, and critically evaluate the results, in the context of loosely defined scenarios, using structured arguments based on subject knowledge to justify the selection and use of tools and techniques;
- x Produce work involving problem identification and the analysis, design or the development of a system, with appropriate documentation, recognising the important relationships between these;
- x Show problem solving and critical evaluation skills, draw upon supporting evidence and demonstrate a deep understanding of the need for a high quality solution;
- x Demonstrate the ability to produce organised work with minimum guidance;
- x Demonstrate the ability to produce a substantial piece of work from problem inception to implementation and documentation.

#### BSc Computer Science (Web and Mobile Development) learning outcomes

Students who successfully complete the BSc Computer Science (Web and Mobile Development) will, in addition to the learning objectives of the Diploma of Higher Education and Certificate of Higher Education, be able to:

- x Demonstrate a sound understanding of all the main areas of web development and the main areas of user experience analysis, design and development with the ability to exercise critical judgement to the evaluation of web-based





- x Demonstrate a sound understanding of all the main areas of games development and with the ability to exercise critical judgement to the evaluation of games development applications;
- x Apply a critical understanding of essential concepts, principles and practices of games development, and critically evaluate the results, in the context of loosely

- x Select and apply essential concepts, principles and practices of computer science in the context of well defined, limited scenarios, using structured arguments to justify the selection and use of tools and techniques;
- x Develop a simple system to a specification, with documentation;
- x Show problem solving and evaluation skills, drawing upon supporting evidence;
- x Demonstrate the ability to produce organised work given appropriate guidance.



scenarios, using structured arguments based on subject knowledge to justify the selection and use of tools and techniques

- x Produce work involving problem identification, the analysis, the design or the development of a system, with appropriate documentation, recognising the important relation



- x Apply a critical understanding of essential concepts, principles and practices of data science, and critically evaluate the results, in the context of loosely defined scenarios, using structured arguments based on subject knowledge to justify the selection and use of tools and techniques
- x Produce work involving problem identification and the analysis, design or the development of a system, with appropriate documentation, recognising the important relationships between these
- x Show problem solving and critical evaluation skills, draw upon supporting evidence
- x Demonstrate the ability to produce organised work as an individual with structured guidance

#### Graduate Certificate (Machine Learning and Artificial Learning) Learning outcomes

Students who successfully complete the Graduate Certificate in Machine Learning and Artificial Intelligence will be able to:

- x Demonstrate a sound understanding of the main areas of machine learning and artificial intelligence and also demonstrate the ability to exercise critical judgement to the evaluation of machine learning and artificial intelligence applications
- x Apply a critical understanding of essential concepts, principles and practices of machine learning and artificial intelligence, and critically evaluate the results, in the

x Show problem solving and critical evaluation skills, draw upon supporting evidence

x



- x Demonstrate a sound understanding of the main areas of physical computing and internet of things and also demonstrate the ability to exercise critical judgement to the evaluation of physical computing development applications and their place in the internet of things
- x Apply a critical understanding of essential concepts, principles and practices of physical computing and internet of things, and critically evaluate the results, in the context of loosely defined scenarios, using structured arguments based on subject knowledge to justify the selection and use of tools and techniques
- x Produce work involving problem identification and the analysis, design or the development of a system, with appropriate documentation, recognising the important relationships between these
- x Show problem solving and critical evaluation skills, draw upon supporting evidence
- x Demonstrate the ability to produce organised work as an individual with structured guidance

#### Graduate Certificate (Games Development) | Learning outcomes

Students who successfully complete the Graduate Certificate in Games Development will be able to:

- x Demonstrate a sound understanding of the main areas of games development and also demonstrate the ability to exercise critical judgement to the evaluation of games development applications
- x Apply a critical understanding of essential concepts, principles and practices of games development, and critically evaluate the results, in the context of loosely defined scenarios, using structured arguments based on subject knowledge to justify the selection and use of tools and techniques
- x Produce work involving problem identification and the analysis, design or the development of a system, with appropriate documentation, recognising the important relationships between these
- x Show problem solving and critical evaluation skills, draw upon supporting evidence
- x Demonstrate the ability to produce organised work as an individual with structured guidance

#### Graduate Certificate (Virtual Reality) | Learning outcomes

- x Produce work involving problem identification and the analysis, design or the development of a system, with appropriate documentation, recognising the important relationships between these

x



x

- x Annual programme reports: produced for all programmes in order to review and enhance the provision and

management, presentation and teamwork. You will also build a portfolio of work that you can present to potential employers. Depending on the route you choose, the final stage of the degree, you can specialise in particular areas of interest such as machine learning, web development, data science and video game development.

With the BSc Computer Science you will gain a broad range of computational and mathematical jobs in the creative industries, business, finance, education, medicine engineering and science. Typical job titles include application programmer, software engineer, creative coder, video game developer and

computer systems we use every day. HCI draws on a range of hard and soft skills and is a naturally cross-disciplinary subject.

With the BSc Computer Science (User Experience), you will be able to apply for jobs which involve a flair for design, and engagement with end users in a range of sectors, wherever there is a need for effective user interface design.

