Programme Specification 2023–2024

Computer Science (and specialisms)

BSc
Grad ate Diploma
Grad ate Certificate

[illegible]

Programme Specification 2023-2024 Computer Science and specialisms (BSc, Graduate Diploma, Graduate Certificate)

Important information regarding the Programme Specification

About this document

Last revised: 10 May 2023

The Programme Specification gives a broad outline of the structure and content of the

Significant changes made to the Computer Science programme specification 2023-2024

Performance Based Admissions

Rules for progressing while on the PBA route have been clarified

Intermediate awards

The rules for the accumulation of intermediate awards has been revised.

Education

Programme Specification 2023-2024 Computer Science and specialisms (BSc, Graduate Diploma, Graduate Certificate)

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:

three 15 credit **core** modules, plus

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

A student awarded the Graduate Diploma with honours will have accumulated 120 UK

Programme Specification 2023-2024 Computer Science

Programme Specification 2023-2024 Computer

A broadband internet connection capable of streaming video and a minimum of 0.15Mbps upload speed.

Minimum device requirements are subject to change and older operating systems may become obsolete over time.

It should also have the following applications installed:

Word processor (for Microsoft Word documents)

A PDF reader (e.g. Adobe)

Please note: full mobile access is not available for all programmes. Proctored assessments will not work on any smartphone, tablet, Chromebook, Linux Operating Systems or other mobile device of any kind.

Module specific requirements

Note: The published fees associated with this programme of study do not include the cost of any additional hardware or software purchased. Students are responsible for budgeting for this requirement.

Certain modules may have additional software requirements and students should

Module	Requirements
Computational Mathematics	A scientific calculator or equivalent
Mobile Development	

Students with specific access requirements

The University of London welcomes applications from

Demonstrate the ability to produce organised work with minimum guidance.

Demonstrate the ability to produce a substantial piece of work from problem inception to implementation and documentation.

BSc Computer Science (Data Science) learning outcomes

Students who successfully complete the BSc Computer Science (Data Science) will, in addition to the learning objectives

BSc Computer Science (Physical Computing and Internet of Things) learning outcomes

Students who successfully complete the BSc Computer Science (Physical Computing and Internet of Things) will, in addition to the learning objectives of the Diploma of Higher Education and Certificate of Higher Education,

BSc Computer Science (Virtual Reality)

Graduate Diploma (Web Development) learning outcomes

Students who successfully complete the Graduate Diploma in Web Development will be able to:

Demonstrate a sound understanding of the main areas of web development, with an ability to exercise critical judgement to the evaluation of web-based applications.

Apply a critical understanding of essential concepts, principles, and practices of web 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.

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

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

Demonstrate the ability to produce a substantial piece of work from problem inception to implementation and documentation.

Graduate Diploma (User Experience) learning outcomes

Students who successfully complete the Graduate Diploma in User Experience will be able to:

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

Programme Specification 2023-2024

Apply a critical understanding of essential concepts, principles and practices of machine learning and artificial intelligence, 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.

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

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

Demonstrate the ability to produce organised work as an individual with structured guidance.

Graduate Certificate (Web Development) learning outcomes

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

Demonstrate a sound understanding of the main areas of web development and also demonstrate the ability to exercise critical judgement to the evaluation of web development applications.

Apply a critical understanding of essential concepts, principles and practices of web 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.

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

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

Demonstrate the ability to produce organised work as an individual with structured guidance.

Graduate Certificate (User Experience) learning outcomes

Students who successfully complete the Graduate Certificate in User Experience will be able to:

Demonstrate the ability to produce organised work as an individual with structured guidance.

Graduate Certificate (Mobile Development) learning outcomes

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

Demonstrate a sound understanding of the main areas of mobile application development and also demonstrate the ability to exercise critical judgement to the evaluation of mobile applications.

Apply a critical understanding of essential concepts, principles, and practices of mobile 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.

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

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

Demonstrate the ability to produce organised work as an individual with structured guidance.

Graduate Certificate (Physical Computing and the Internet of Things) learning outcomes

Students who successfully complete the Graduate Certificate in Physical Computing and Internet of Things will be able to:

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.

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.

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

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

Demonstrate the ability to produce organised work as an individual with structured guidance.

Learning, teaching and assessment strategies

The core principles of the

Tutors and Administrators at teaching institutions.

Assessment methods

All examinations are scheduled using an online delivery method. You must ensure that your device is kept up to date and complies with University Computer Requirements.

Wherever they are held, all examinations take place on the same dates and at specific times in line with the published timetables.

Each core and optional module, excluding the final project, is assessed by two elements according to one of three types:

Type I: Coursework and a timed written examination, both equally weighted at 50:50

Type II: Coursework I and coursework II, both equally weighted at 50:50

Type III:

Programme Specification 2023-2024 Computer Science and specialisms (BSc, Graduate Diploma, Graduate Certificate)

Programme Specification 2023-2024

With the BSc Computer Science, you will be able to

there is a need for effective user interface design. Typical job titles include UX engineer, user experience designer and UI designer.

BSc Computer Science (Physical Computing and the Internet of Things)

Physical computing involves the creation of hardware devices that can sense and act in the real world. Physical computing techniques underpin a wide range of contemporary technology trends such as the Internet of Things, the quantified self and smart homes. There are many applications of physical computing, for example in creative arts, museums, ubiquitous and embedded computing, scientific sensing, robotics, engineering control systems and robotics.

With the BSc Computer Science (Physical Computing and Internet of Things), you will be able to apply for jobs in a rapidly growing and exciting area which is finding applications across different sectors. Typical job titles include Internet of Things (IoT) engineer, creative technologist and embedded software engineer.

BSc Computer Science (Games Development)

Video games are a critical application area for computer science, and the games industry forms a significant part of the creative economy. It is a complicated subject, drawing on other areas such as computer graphics, interaction design and artificial intelligence.

With the BSc Computer Science (Games Development), you will be able to apply for a range of jobs in the creative industries, especially in the video games industry. Typical job titles include game designer, video game tester and video game programmer.

BSc Computer Science (Virtual Reality)

Virtual Reality (VR) involves the creation of immersive, simulated environments using computer systems. Recent technology advances have made it possible to create high fidelity, high immersion virtual realities which people can access with consumer hardware. VR has many application areas, including entertainment, education and military.

With the BSc Computer Science (Virtual Reality), you will be able to apply for exciting jobs in an emerging area which spans sectors such as the creative 18 464.59 Tm0 0 0.6t[

The Alumni Community

Upon finishing a course of study, graduates automatically become part of the University of London alumni community, a diverse global network of more than one million graduates