UNIVERSITY OF LONDON

Programme Specification 2024–2025

Data Science
MSc
PGDip
PGCert
Individual modules

Data Science and Financial Technology
MSc
PGDip
Individual modules

Data Science and Artificial Intelligence
MSc
PGDip
Individual modules

Important document – please read

Programme Specification 2024-2025: Data Science (MSc/PGDip/PGCert); Data Science and Artificial Intelligence (MSc/PGDip); Data Science and Financial Technology (MSc/PGDip)

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Important information regarding the Programme Specification

About this document

Last revised: 21 March 2024

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 information referred to in this programme specification is included in more detail on the University of London website. Where this is the case, links to the relevant webpage are included.

Where links to external organisations are provided, the University of London is not responsible for their content and does not recommend nor necessarily agree with opinions expressed and services provided at those sites.

If you have a query about any of the programme information provided, whether here or on the website, registered students should use the *Ask a question* button in the Student Portal. Otherwise, the *Contact Us* button at the bottom corner of every webpage should be used.

For the Data Science programmes, you should note the following terminology:

Preparatory course: a non-credit bearing, non-assessed optional short course available to students to ensure readiness to start core and compulsory modules.

Module: Individual units of a programme are called modules. Each unit is a self-contained, formally structured learning experience with a coherent and explicit set of learning outcomes and assessment criteria.

Core module: Core modules are central to the teaching and learning on the programme and often introduce concepts and ideas that appear in the optional modules. Core modules must be passed and cannot be compensated.

Compulsory module: Compulsory modules introduce concepts and ideas that appear in optional modules. Students must take these modules as part of their studies. They are subject to the rules for compensation.

Optional module: Optional modules are designed to extend the concepts and ideas introduced in core and compulsory modules and to introduce other relevant concepts and techniques. Students may select their optional modules from a list. They are subject to the rules for compensation.

Preparatory course: a non-credit bearing, optional course available to students to ensure readiness to start core and compulsory modules.

Key revisions made

Programme specifications are revised annually. The quality committee of Goldsmiths, University of London, as part of its annual review of standards, confirms the programme structure and the educational aims and learning outcomes, and advises on any development in student support.

Significant changes made to the programme specification 2024-2025

No significant changes.

Programme titles and awards

Postgraduate Degrees of the University of London may be classified. Your award certificate will indicate the level of the academic performance you achieved by classifying your award. The classification of your degree will be based on the marks from the assessed work you complete.

The classification system for the Master of Science/Postgraduate Diploma/Postgraduate Certificate in Data Science, Master of Science/Postgraduate Diploma in Data Science and Artificial Intelligence, and Master of Science/Postgraduate Diploma in Data Science and Financial Technology is as follows:

Distinction; Merit; Pass.

Specific rules for the classification of awards are given in the Programme Regulations, under Scheme of Award.

Programme titles

Data Science

Data Science and Artificial Intelligence

Data Science and Financial Technology

Qualifications

Master of Science in Data Science

Master of Science in Data Science and Artificial Intelligence

Master of Science in Data Science and Financial Technology

Postgraduate Diploma in Data Science

Postgraduate Diploma in Data Science and Artificial Intelligence

Postgraduate Diploma in Data Science and Financial Technology

Postgraduate Certificate in Data Science

Intermediate qualifications

Students may not normally request a lower intermediate qualification if studying on a higher qualification (except as an exit qualification) or accumulate these qualifications as they progress from lower to higher qualifications.

Exit qualifications

Students who for academic or personal reasons are unable to complete their MSc may exit the programme with the successful completion of 120 or 60 credits and be awarded a Postgraduate Diploma or Postgraduate Certificate respectively. Postgraduate Diplomas will be awarded in line with the student's registered programme of study. The Postgraduate Certificate will be awarded in Data Science only. Exit qualifications are awarded at the

discretion of the Board of Examiners. Once a student has accepted an exit qualification they will not be permitted to continue their study towards a higher award on the programmes.

Individual modules

There is also provision for individual modules to be studied on a stand-alone basis.

Information on the maximum number of credits permitted on a stand-alone basis is given in the Programme Regulations.

Qualification titles may be abbreviated as follows:

Master of Science – MSc

Postgraduate Diploma – PGDip

Postgraduate Certificate – PGCert

Level of the programmes

The Framework for Higher Education Qualifications in England, Wales and Northern Ireland (FHEQ) forms part of the UK Quality Code for Higher Education of the Quality Assurance Agency for Higher Education (QAA).

The awards are placed at the following Levels of the Framework for Higher Education Qualifications (FHEQ):

- MSc – Level 7
- PGDip – Level 7
- PGCert – Level 7

Awarding body

University of London

Registering body

University of London

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.

The website provides further information about the University's Recognised Teaching Centres.

Maximum and minimum periods of registration

The MSc can be completed in one year, or students can take up to five years. This flexibility allows students to study at their own pace (either part-time or full-time), adjusting the intensity of their study to suit their needs. The minimum and maximum periods of registration for the programmes are set out below:

	Minimum	Maximum**
MSc	One year*	Five years
PGDip	One year*	Five years
PGCert	Six months*	Five years
Individual modules	One year*	Two years

*Subject to module availability

**Some maximum period of registration have been reduced for students first registering in 2023-24 and later. If you began your studies before 2023-24 you will retain the period of registration granted when you first registered.

Programme structures

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

Students have an online induction session available through the Virtual Learning Environment (VLE) prior to the start of their initial study session, which will include orientation of their learning environment and guidance on the structure and learning expectations of the programme.

The **MSc Data Science** is a 180 UK credit degree programme (90 ECTS credits). For this MSc a student must complete:

- four core modules (60 credits total)
- one compulsory module (15 credits total)
- five optional modules (75 credits total)
- a Final Project (30 credits total)

The **MSc Data Science and Artificial Intelligence** is a 180 UK credit degree programme (90 ECTS credits). For this MSc, a student must complete:

- four core modules (60 credits total)
- three compulsory modules (45 credits total)
- three optional modules (45 credits total)
- a Final Project (30 credits total)

The **MSc Data Science and Financial Technology** is a 180 UK credit degree programme (90 ECTS credits). For this MSc a student must complete:

- four core modules (60 credits total)
- three compulsory modules (45 credits total)
- three optional modules (45 credits total)
- a Final Project (30 credits total)

The **PGDip Data Science** is a 120 credit programme (60 ECTS credits). For this PGDip a student must complete:

- four core modules chosen (60 credits total)
- one compulsory module (15 credits total)
- three optional modules (45 credits total)

The **PGDip Data Science and Artificial Intelligence** is a 120 credit programme (60 ECTS credits). For this PGDip, a student must complete:

- four core modules chosen (60 credits total)
- three compulsory modules (45 credits total)
- one optional modules (15 credits total)

The **PGDip Data Science and Financial Technology** is a 120 credit programme (60 ECTS credits). For this Postgraduate Diploma a student must complete:

- four core modules chosen (60 credits total)
- three compulsory modules (45 credits total)
- one optional module (15 credits total)

The **PGCert Data Science** is a 60 credit programme (30 ECTS credits). For the PGCert a student must complete:

- any two core modules (30 credits total)
- any two other modules (either further core or optional modules) (30 credits total)

Credit value of modules

Further information about the credit systems used by universities in the UK and Europe is provided by the Quality Assurance Agency and the European Credit Transfer and Accumulation System.

Where credits are assigned to modules of a programme, credit indicates the amount of learning carried out in terms of the notional number of study hours needed, and the specified Framework for Higher Education Qualifications in England (FHEQ) credit level indicates the depth, complexity and intellectual demand of learning involved. The details below indicate the UK credits and the European Credit Transfer and Accumulation System (ECTS) values.

For the Data Science programmes, modules have the following credit values:

- core, compulsory, and optional modules are each worth 15 UK credits or 7.5 ECTS credits
- the final project is worth 30 UK credits or 15 ECTS credits

One UK credit equates to a notional ten hours of study.

Each 15 credit module equates to 150 hours. Over the 10 teaching weeks you will need to dedicate around 15 hours of study per module per week.

Each 30 credit module equates to 300 hours. Over the 20 teaching weeks you will need to dedicate around 15 hours of study per module per week

Each 15 credit module equates to 150 hours. Over the 20 teaching weeks you will need to dedicate around 7 – 8 hours of study per module per week.

Recognition of prior learning

Recognition of prior learning is a generic term for the process by which we recognise and, where appropriate, award credit for learning that has taken place at the University of London or elsewhere. Where the prior learning covered a similar syllabus to a module/course on the University of London programme, credit will be awarded as if you had taken the University of London module/course.

See the General Regulations (Section 3) and the Programme Regulations for more rules relating to prior learning.

For these programmes, the University of London may recognise your prior learning and award you credit towards the qualification up to the value of 120 UK credits for the MSc, 60 UK credits for the PGDip and 30 UK credits for the PGCert. Recognition of prior learning will not be considered for the Final Project.

Entrance requirements

Applicants must submit an application in line with the procedures and deadlines set out on the website.

Entry Route 1

To be eligible to register for any of the Data Science programmes, applicants must have the following:

- A bachelor's degree (or an acceptable equivalent) in a relevant subject which is considered at least comparable to a UK second class honours degree, from an institution acceptable to the University.
- Previous degrees should normally include a sufficient level of programming such as Python detailed in your transcript. Whilst other degrees such as Engineering and Mathematics will be considered on a case-by-case basis.

If we consider the previous degree as non-relevant, the application will be considered under Entry Route 2 below. Applicants will be asked to take our online preparatory course, Foundations of Data Science: K-means Clustering in Python, before starting the Data Science programme. This course requires approximately 30 hours of study.

Entry Route 2

If applicants do not meet the academic requirements for entry route 1, they can apply for the programme via entry route 2.

To be eligible to register, applicants must have the following:

- A bachelor's degree (or an acceptable equivalent) in any subject which is considered at least comparable to a UK second class honours degree, from an institution acceptable to the University.
- In addition to the above, applicants will be required to complete an online preparatory course prior to registration. The online preparatory course, Foundations of Data Science: K-Means Clustering in Python, requires approximately 30 hours of study.

Full details of entrance requirements are given on the programme page, under the Entrance requirements tab.

Along with the online preparatory course, Foundations of Data Science: K-Means Clustering in Python, it is also strongly recommended that all students complete our Programming in Python preliminary material when commencing study on the programme.

English language requirements for the Data Science programmes

All applicants must satisfy the English language requirements for the programme. These are set out in detail on the programme page. All teaching is in English. Therefore, students need to have the required level of written and spoken English to cope with their studies right from the start.

Where an applicant does not meet the prescribed English language proficiency requirements but believes that they can demonstrate the requisite proficiency for admission the University may, at its discretion, consider the application.

Applicants will meet the English language requirement if they have passed any of the following within the past three years:

- (IELTS) International English Language Testing System - an overall score of 6.5 or above with a minimum of 6.0 in the written test
- Pearson Test of English (Academic) – an overall score of 59 or above, with at least 59 in both the reading and writing tests and at least 54 in the speaking and listening tests
- Cambridge English: Proficiency qualification
- Cambridge Certificate of Advanced English - grade C or above; *or*,
- (TOEFL) iBT Test of English as a Foreign Language – an overall score of 92 or above, with at least 22 in both the reading and writing skills tests and at least 20 in both the speaking and listening tests.

Alternatively, an applicant may satisfy the English language requirements for an MSc, PGDip or PGCert if they have:

- Substantial education (minimum of eighteen months) conducted and assessed in English or
- Substantial work experience (minimum of eighteen months) conducted in English.

Where an applicant does not meet the prescribed English language proficiency requirements but believes that they can demonstrate the requisite proficiency for admission the University may, at its discretion, consider the application.

Internet access and computer specification

Students will require regular access to a portable computer with an internet connection to use the University of London's online resources and systems.

Students must be able to download and install software to their Windows or MacOS device to include secure examination browsers for online assessment purposes (if offered on your programme of study). Depending on the security settings for each assessment you may be required to have full administrator rights on your computer to install and run the software needed to take part in the assessment. Full administration rights are likely to apply to a computer that you own but not to one provided by your employer, for example.

Computer requirements

The portable computer must have at least the following minimum specification:

- Windows: 10 and 11 on 64-bit platforms
- MacOS Big Sur (version 11) and higher
- CPUs newer than 2011 (Intel Sandy Bridge (Core i3, i5 and i7 or newer))
- OpenGL 2.0 graphics driver
- Local storage for the recording of proctored examinations (75MB per hour)
- Web camera & microphone (internal or external)
- 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)

We are developing further security protocols and therefore students will require a mobile device (such as a mobile phone or tablet/iPad) to approve for our services. Full details, including specifications, will be provided ahead of the implementation .

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.

Students with specific access requirements

The University of London welcomes applications from disabled students and/or those who have access requirements. The University will make every effort to provide reasonable adjustments to enable those with a disability, learning difficulty or access requirements to have the same opportunity as all other students to successfully complete their studies.

The University is committed to managing the application procedure and the programme itself to ensure that services are accessible for all students and that an inclusive environment is created. Students with a disability, or others who may need access arrangements to assist in taking examinations, should complete the relevant section of the application form, or contact the Inclusive Practice Manager. A separate room or other arrangements may be considered.

Requests are considered by a University panel, whose purpose is to ensure that students with disabilities and/or specific access requirements are neither advantaged nor disadvantaged by such arrangements when compared with other students. These considerations remain separate from the academic selection processes.

For further information, see Inclusive Practice Policy

Sources of funding and scholarships

Information about potential sources of funding and scholarships is updated annually and where available is included in the prospectus web pages.

For further information see the website

Educational aims and learning outcomes of the programmes

Programme aims

These innovative online programmes aim to provide students with support through virtual and local learning environments, and the flexibility to study at any time and from anywhere around the globe. They will also provide students with the technical and practical skills to analyse the data that is key to success in future business, digital media and science.

Students will gain:

- a firm grounding in the theory of data mining, statistics and machine learning;
- hands-on experience of real world applications, such as social media, biomedical data and financial data and;
- the opportunity to work with industry standard software tools.

MSc Learning Outcomes

A: Knowledge, Understanding and Cognitive Skills

A student who successfully completes the **MSc Data Science** is expected to be able to:

1. Explain and critically assess the machine learning and statistical data mining techniques used in data analytics and in other related areas.
2. Critically evaluate emerging data analysis technologies and how they can be applied to different types and amounts of data.
3. Analyse in depth how data analysis techniques can be applied to a range of interdisciplinary research areas.
4. Compare and contrast practical and theoretical contexts in which data scientists work.

A student who successfully completes the **MSc Data Science and Artificial Intelligence** is expected to be able to:

1. Explain and critically assess a range of artificial intelligence techniques used in data analytics and in other related areas.
2. Critically evaluate emerging data analysis technologies and assess how it can be applied to different types and amounts of data.
3. Analyse in depth how artificial intelligence techniques can be applied to a range of interdisciplinary research areas.
4. Compare and contrast practical and theoretical contexts in which data scientists work.

A student who successfully completes the **MSc Data Science and Financial Technology** is expected to be able to:

1. Explain and critically assess a range of machine learning and financial technologies used in data analytics and in other related areas.

2. Critically evaluate emerging data analysis technologies and assess how it can be applied to different types and amounts of data.
3. Explain and critically assess how data analysis techniques can be applied to the analysis of financial markets.
4. Compare and contrast practical and theoretical contexts in which data scientists work.

B: Practical, Professional and Key Skills

A student who successfully completes the **MSc Data Science** is expected to be able to:

1. Critically analyse the application of technology to real world problems particularly in industry and interdisciplinary research.
2. Apply advanced skills and research-led specialist knowledge in the areas of machine learning and statistics to the design of software and data analyses
3. Demonstrate a deep understanding of cutting edge technologies in the creation of a substantial commercially and/or research-wise relevant project.
4. Propose, plan, execute and evaluate a significant piece of original work.
5. Design and programme sufficiently complex computer software and data products.
6. Use academic writing and presentation skills to write and present about data science topics.

A student who successfully completes the **MSc Data Science and Artificial Intelligence** is expected to be able to:

1. Critically analyse the application of technology to a range of real world problems particularly in industry and interdisciplinary research.
2. Apply advanced skills and research-led specialist knowledge in the areas of artificial intelligence to the design of software and data analyses.
3. Demonstrate a deep understanding of cutting edge technologies in the creation of a substantial commercially and/or research-wise relevant project.
4. Propose, plan, execute and evaluate a significant piece of original work.
5. Design and program complex computer software and data products.
6. Use academic writing and presentation skills to write and present about data science topics.

A student who successfully completes the **MSc Data Science and Financial Technology** is expected to be able to:

1. Critically analyse the application of technology to a range of real world problems particularly in industry.
2. Apply advanced skills and specialist knowledge in the areas of machine learning and financial technologies to the design of software and data analyses.

3. Demonstrate a deep understanding of cutting edge technologies in the creation of a substantial commercially and/or research-wise relevant project.
4. Propose, plan, execute and evaluate a significant piece of original work.
5. Design and program complex computer software and data products.
6. Use academic writing and presentation skills to write and present about data science topics.

PGDip Learning Outcomes

A: Knowledge, Understanding and Cognitive Skills

A student who successfully completes the **PGDip Data Science** is expected to be able to:

1. Explain and critically assess a range of machine learning and statistical data mining techniques used in data analytics and in other related areas.
2. Critically evaluate emerging data analysis technologies and assess how it can be applied to different types and amounts of data.
3. Analyse in depth how data analysis techniques can be applied to a range of interdisciplinary research areas.
4. Compare and critically contrast practical and theoretical contexts in which data scientists work.

A student who successfully completes the **PGDip Data Science and Artificial Intelligence** is expected to be able to:

1. Explain and critically assess a range of artificial intelligence techniques used in data analytics and in other related areas.
2. Critically evaluate emerging data analysis technologies and assess how it can be applied to different types and amounts of data.
3. Analyse in depth how artificial intelligence techniques can be applied to a range of interdisciplinary research areas.
4. Compare and contrast practical and theoretical contexts in which data scientists work.

A student who successfully completes the **PGDip Data Science and Financial Technology** is expected to be able to:

1. Explain and critically assess a range of machine learning and financial technologies used in data analytics and in other related areas.
2. Critically evaluate emerging data analysis technologies and assess how it can be applied to different types and amounts of data.
3. Explain and critically assess how data analysis techniques can be applied to the analysis of financial markets.
4. Compare and contrast practical and theoretical contexts in which data scientists work.

B: Practical, Professional and Key Skills

A student who successfully completes the **PGDip Data Science** is expected to be able to:

1. Critically analyse the application of technology to a range of real world problems particularly in industry and interdisciplinary research.
2. Apply advanced skills and research-led specialist knowledge in the areas of machine learning and statistics to the design of software and data analyses.
3. Demonstrate a deep understanding of cutting edge technologies in the creation of a substantial commercially and/or research-wise relevant project.
4. Design and program sufficiently complex computer software and data products.

A student who successfully completes the **PGDip Data Science and Artificial Intelligence** is expected to be able to:

1. Critically analyse the application of technology to a range of real world problems particularly in industry and interdisciplinary research.
2. Apply advanced skills and research-led specialist knowledge in the areas of artificial intelligence to the design of software and data analyses.
3. Apply an understanding of cutting edge technologies in the creation of a substantial commercially and/or research-wise relevant project.
4. Design and program sufficiently complex computer software and data products.

A student who successfully completes the **PGDip Data Science and Financial Technology** is expected to be able to:

1. Critically analyse the application of technology to a range of real world problems particularly in industry.
2. Apply advanced skills and specialist knowledge in the areas of machine learning and financial technologies to the design of software and data analyses.
3. Apply an understanding of cutting edge technologies in the creation of a substantial commercially and/or research-wise relevant project.
4. Design and program sufficiently complex computer software and data products.

PGCert Learning Outcomes

A: Knowledge, Understanding and Cognitive Skills

A student who successfully completes the **PGCert Data Science** is expected to be able to:

1. Explain and critically assess a range of machine learning and statistical data mining techniques used in data analytics and in other related areas.
2. Critically evaluate emerging data analysis technologies and assess how it can be applied to different types and amounts of data.
3. Compare and critically contrast practical and theoretical contexts in which data scientists work.

B: Practical, Professional and Key Skills

A student who successfully completes the **PGCert Data Science** is expected to be able to:

1. Critically analyse the application of technology to a range of real world problems particularly in industry and interdisciplinary research.
2. Apply advanced skills and research-led specialist knowledge in the areas of machine learning and statistics to the design of software and data analyses.
3. Design and program sufficiently complex computer software and data products.

Learning, teaching and assessment strategies

The core principles of the learning, teaching and assessment strategy for these programmes are outlined below.

Principle 1: Ensuring students are prepared for study

Students will be provided with opportunities to sample the learning content of the Data Science programmes. An online induction will ensure that they are prepared for study and are familiar with the learning environment and sources of support during their student journey.

Principle 2: An engaging and vibrant learning environment

All students will have access to an online learning environment with learning support and tools enabling them to monitor their progress, assessing fulfilment of learning outcomes and development of skills-based outcomes throughout the curriculum. The learning environment will provide a framework for the level of support selected by students, which involves local and online tuition services.

Principle 3: Learning content

The learning content will be designed to provide students with opportunities to engage, and encourage reflective and deep learning, with accessibility a key feature to enable students to study across a range of mobile and media channels.

Principle 4: Student support

All students will have access to the learning environment, learning content, tools and activities related to their chosen programme of study. Students will be able to select from two modes of study: web supported learning or institution supported learning.

Principle 5: Flexibility

To facilitate the requirements of a diverse global community of learners a core feature of this programme is flexibility in the design of the curriculum, providing for pathways to sub-degree and full degree awards and facilitating student progress at a pace suitable to their circumstance.

Principle 6: Assessment

A core feature of these programmes will be a varied range of learning activities embedded within the learning content for each module, designed to provide feedback to students on their progress towards learning outcomes. Summative assessment methods will be designed to promote retention of knowledge, providing encouragement through tutor feedback, with as wide a range of methods as possible to most effectively assess learning outcomes, within the context of the need for secure and reliable techniques appropriate to flexible learning.

Principle 7: Staff Development

The design, development and delivery of these programmes will be supported with training for:

- Academic teams involved in the development of the materials and assessment;
- Module Leaders;
- Tutors and Administrators at teaching institutions.

Assessment methods

All assessments are submitted online via a University of London platform. Students must ensure that their device is kept up to date and complies with University Computer Requirements.

An examination is defined as an element of assessment that takes place in a controlled environment. Students will be given details of how the modules on their programme are assessed, the specific environment or location that is permitted and the time allowed for the assessment.

Examinations are taken using an online delivery method and take place in September and March each year. All examinations take place on the same dates and at specific times in line with the published timetables

For students who study at a Recognised Teaching Centres, examinations are normally held at established examination centres worldwide. Otherwise, your online examinations will be proctored remotely.

For all programmes, each core and optional module (apart from the final project) is summatively assessed by coursework elements that make up a total of 100% or a combination of coursework and a written examination element that make up a total of 100%. The coursework elements consist of one or more written assignments and/or one or more programming assignments. The written examination is two hours in length; some examinations are unseen while others allow for some aspect of the examination to be disclosed in advance.

The final project is summatively assessed by a series of coursework submissions and an unseen, final exam. Coursework accounts for 70% of the final mark and the written examination for 30% of the final mark. The coursework submission constitutes multiple, staged deliverables including, but not limited to: a project proposal, a preliminary report, weekly progress logs, a final report and a presentation. The project assessment and the feedback received by the student, is designed to encourage consistent, well-structured

activity and progress throughout the project. The written examination is two hours in length and consists of general questions about academic best practice, as well as specific questions about the candidate's own project work.

The grade awarded for each module is based on all the elements of assessment.

Students are required to pass each element of the assessment subject to the application of the rules for marginal compensation, where permitted. Refer to the Programme Regulations.

Examinations are held at Examination centres throughout the world.

Coursework must be submitted in the VLE by prescribed deadlines.

Student support and guidance

The following summarises the support and guidance available to students:

- Student Portal: for accessing student induction, study skills support, careers and employability resources, student wellbeing advice.
- University of London Careers Service – offers tailored careers and employability support to students whatever their course, wherever they are studying, and whether they are starting, developing, or changing their career. Support includes webinars led by careers consultants, employer and alumni panel events and a range of online careers resources.
- The Virtual Learning Environment (VLE): This gives access to materials (including lessons, activities and assignments) for each module studied.
- The VLE also includes a range of additional study resources such as:
    - Past examination papers and Examiners' commentaries; these provide generic feedback from assessment.
- Student Guide: This provides information which is common to all students and gives guidance on a range of issues from the start of a student's relationship with the University of London through to their graduation.
- Programme Regulations.
- The Online Library: This provides a range of full-text, multidisciplinary databases where journal articles, book reviews and reports can be found.
- University of London library: Registered students may use the resources located within the Senate House library.
- A University of London email account and web area for personal information management.

Quality evaluation and enhancement

The University of London delivers the majority of its online and distance learning programmes through a collaboration between the University of London Worldwide and University of London federation members. However, some of the online and distance learning programmes draw solely on academic input from the University of London and are delivered without academic lead by a federation member. The policies, partnerships (where applicable) and quality assurance mechanisms applicable for the programmes are defined in the following key documents: The Quality Assurance Schedules, Guidelines for Examinations, General Regulations and, for each programme, programme specific regulations.

Awards standards

All University of London qualifications must comply with the Office for Students' (OfS) Conditions of Registration relating to quality and standards, which includes condition B5 (sector-recognised standards). This is to ensure appropriate standards for each qualification. In addition, every online and distance learning programme that is developed by a federation member of the University of London (or a consortium with representation by more than one federation member) will be developed to the same standard as would be applied within the institution concerned. Proportionate and robust approval procedures, including external scrutiny and student engagement, are in place for all programmes. Learning materials are written and all assessments are set and marked by academic staff who are required to apply the University's academic standards.

Review and evaluation mechanisms

Some of the key mechanisms in place to assure the standards of all University of London awards and the quality of the student experience include:

- Annual programme reports: produced for all programmes in order to review and enhance the provision and to plan ahead;
- Independent external examiners: submit reports every year to confirm that a programme has been assessed properly and meets the appropriate academic standards;
- Annual student performance, progression and completion statistics
- Periodic programme reviews: carried out every 4-6 years to review how a programme has developed over time and to make sure that it remains current and continues to provide a good student experience.

Enhancements are made as necessary to ensure that systems remain effective and rigorous.

Student feedback and engagement

The principal channel for collecting feedback from students is the Student Experience Survey. Carried out every year, it collects feedback from the student body on a range of topics relating to the student lifecycle. The results are analysed externally and then considered in a number of different ways, including by the programme team, principal

committees and the senior leadership team. Details of any resulting actions taken are published on the Virtual Learning Environment and the Student Portal.

Additionally, on completion of their programme of study, students will be invited to take a survey that seeks to measure what they have gained from their studies.

There are also opportunities for students to get involved in governance. An undergraduate and postgraduate student member is appointed by the University to the majority of committees through an annual appointment round. Some programmes also recruit student members at the programme level. Students are frequently invited to take part in quality review processes such as Periodic Programme Reviews, Programme approval, Thematic Reviews, MOOC review panels and ad hoc focus groups. Opportunities such as these are advertised through social media and on the website. More information can be found on the website.

Students can also apply to join the Student Voice Group, which meets four times a year to consider initiatives for enhancing student experience. Notes from these meetings are published on the Student Portal.

After graduation

Further study

Successful completion of the programme may serve as preparation for students who wish to go on to take further study in the subject area. Enquiries about further study opportunities should be directed to the University of London Student Advice Centre.

Employment routes

At registration, students are asked to complete a small number of questions relating to where they are in their career planning. This data is used to assist with the implementation of employability strategies and interventions.

The **MSc Data Science** programme develops analytical and critical skills, providing graduates with the tools and competencies needed to intelligently interrogate numerical, textual and qualitative data; to extract meaning from raw information; and to communicate the results of their investigations, and their implications, to stakeholders or other interested parties. These skills lead naturally to embarking on a variety of careers, with employers from technology firms small and large, the biomedical research sector, the charitable and voluntary sector, and the public research sector.

The **MSc Data Science and Artificial Intelligence** programme develops analytical and practical skills, providing graduates with the tools and competencies of intelligent data analysis for decision making and problem solving, and communication of the results of their investigations, and their implications, to stakeholders or other interested parties. These skills lead naturally to embarking on a variety of careers, with employers from leading technology firms, robotics, military, academia, and public research sector.

The **MSc Data Science and Financial Technology** programme develops analytical and practical skills, providing graduates with the tools and competencies needed to intelligently analyse financial data and modern financial markets; to evaluate and predict investment behaviour and investment decisions; and to communicate the results of their investigations, and their implications, to stakeholders or other interested parties. These skills lead naturally to embarking on a variety of careers with employers from financial sector, including financial planning, insurance, marketing, and investment banking.

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 in over 180 countries, providing lifelong links to the University and to each other.

Alumni are encouraged to keep in touch after they graduate and to become active members of the alumni community; in return they receive a number of benefits and services, including an extensive programme of events and engagement opportunities.

More information is available on the alumni webpage.

Follow the alumni community on social media: Facebook, Instagram, LinkedIn