



**UNIVERSITY
OF LONDON**

Programme Specification 2024–2025

Economics, Management,
Finance and the Social
Sciences (EMFSS)

Data Science
Graduate Diploma

Important document – please read

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Important information regarding the Programme Specification

About this document

Last revised 19 February 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 a 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 on each webpage should be used.

Key revisions made

Programme specifications are revised annually. The relevant committee of LSE, 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.

Where changes have been made which may impact on continuing students, these are listed below. For all new students, the programme and general information provided in this document is correct and accurate and will be applicable for the current year.

Significant changes made to the programme specification 2024–2025:

1. [University Computer Requirements](#) have been updated.
2. Assessment methods and delivery have been updated.
3. The Student support and guidance section has been updated to include the University of London Careers Service.
4. The Quality evaluation and enhancement section has been updated.
5. Additional terminology has been added and terminology has changed to reflect the number of credits required throughout these regulations. In previous regulations 'full course' and 'half course' has been used. A full course is equivalent to 30 credits. A half course is equivalent to 15 credits.

Terminology

The following language is specific to the EMFSS BSc Graduate Diplomas:

Course	Individual units of the programme are called courses. Each course is a self-contained, formally structured learning experience with a coherent and explicit set of learning outcomes and assessment criteria.
New course or new credit	A course which you have never previously registered for.
Compulsory course	A course that is named on your programme structure.

Optional course	A course that is not named on your programme structure.
Attempt	You will be considered to have attempted a course if you register for a course, make an assessment entry, and submit assessment elements worth at least 70% of the overall course.
Prerequisite course	A course that you must attempt before you are permitted to register for another specific course.
Corequisite course	A course that you must attempt either before or at the same time as another specific course.
Exclusion or Excluded course	A course which awards credit only if not taken with other courses specified in regulations. See Appendix C for detail.
Discarded course	A course that you have been registered for or attempted, not available on your programme structure, which remains on your student record.
Finalist	A student who can complete their programme in that academic year as set out in regulations.
MCQ	Abbreviation of multiple choice question. A format of assessment.

Programme title and qualifications

Programme title

Data Science

Qualification

Graduate Diploma in Data Science

Level of the programmes

The Framework for Higher Education Qualifications of UK Degree-Awarding Bodies (FHEQ) forms part of the UK Quality Code for Higher Education of the [Quality Assurance Agency for Higher Education](#) (QAA).

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

- | | |
|--|----------------|
| • Bachelor of Science degree (BSc) | Level 6 |
| • Graduate Diploma | Level 6 |
| • Diploma of Higher Education (DipHE) | Level 5 |
| • Certificate of Higher Education (CertHE) | Level 4 |

Relevant QAA subject benchmarks group(s)

See the [QAA website](#) for information

[Mathematics, Statistics and Operational Research](#)

Awarding body

[University of London](#)

Registering body

[University of London](#)

Academic direction

[The London School of Economics and Political Science \(LSE\)](#)

Accreditation by professional or statutory body

Not applicable

Language of study and assessment

English

Mode of study

Most students are required to attend a full- or part-time course of instruction at a teaching centre that is recognised by the University to teach the programme.

If you have not complied with your RTC's Attendance and/or Engagement Policy, you may not be permitted to sit assessment or your assessment entry may be withdrawn.

The [website](#) provides further information about the University's Recognised Teaching Centres.

Programme structures

The Economics, Management, Finance and the Social Sciences programmes are comprised of courses. Each course is referred to as a '100 course', '200 course' or '300 course', corresponding to the following levels of the Framework for Higher Education Qualifications (FHEQ):

- 100 courses are placed at FHEQ Level 4
- 200 courses are placed at FHEQ Level 5
- 300 courses are placed at FHEQ Level 6

Where half courses are indicated, two half courses (15 credits) are equivalent to one full course (30 credits) in terms of structure. For each programme, some courses are compulsory, whilst others can be selected from lists of options called 'selection groups'.

Each Graduate Diploma consists of 120 credits. Where the structure permits, students may take a maximum of 60 credits of 100 courses. Students must take at least 60 credits of 200 or 300 courses.

The current structure can be found on the programme's [Structure](#) page on the University of London website.

Where a student satisfies certain conditions, transfer may be permitted between different Graduate Diplomas. A student registered on a Graduate Diploma cannot transfer to a degree or the Certificate of Higher Education in Social Sciences. Instead, they would need to cancel their registration and submit a request for new registration on their chosen programme.

To be considered for the qualification of a Graduate Diploma, a student must have attempted and passed 120 credits, each course at a mark of 40 or above.

Full details of the Scheme of Award are included in the [Programme Regulations](#).

Maximum and minimum periods of registration

The maximum and minimum period of registration, from a student's effective date of registration, are:

	Minimum	Maximum
Graduate Diploma	One year	Five years

Study materials are made available after registration and on payment of the applicable fee.

Credit value of courses

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 each course of a programme, credit indicates the amount of learning carried out in terms of the notional number of study hours needed, and the specified Frameworks for Higher Education Qualifications of UK Degree-awarding Bodies (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 Economics, Management, Finance and the Social Sciences suite of programmes, credits are assigned to the courses as follows:

- 30 UK credits or 15 ECTS credits for a full course at level 4, or 15 UK credits or 7.5 ECTS credits for a half course at level 4
- 30 UK credits or 15 ECTS credits for a full course at level 5, or 15 UK credits or 7.5 ECTS credits for a half course at level 5
- 30 UK credits or 15 ECTS credits for a full course at level 6, or 15 UK credits or 7.5 ECTS credits for a half course at level 6

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

Entrance requirements

We consider qualifications from around the world. Details are available [on the website](#).

The full list of EMFSS programmes can be found in our [Programme Regulations](#).

Applicants must submit an application in line with the procedures and deadlines set out on the [website](#).

All entrance requirements are set out in detail on the programme page under the Entrance Requirements tab.

Entrance Requirements for the Graduate Diplomas

Age:

Applicants must normally be at least 17 years of age on or before 30 November in the year of initial registration.

Qualifications:

Applicants must have successfully completed one of the following:

- an acceptable bachelor degree
- an acceptable Master's degree (or any other acceptable/appropriately accredited Level 7 award) provided this is at least 1 year full time in duration
- an acceptable Level 5 or Level 6 award (such as an HND or Graduate Certificate) provided this is at least 1 year full time in duration. In addition applicants must submit evidence of at least 2 years relevant work experience.

In addition, applicants must meet the programme-specific requirements given on the [Requirements](#) tab on each programme's page on the website.

English language requirements

Applicants must satisfy the English language requirements for the programme. These are set out in detail on the programme page under the Requirements tab for each programme. 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.

Additional information on English language proficiency tests is given on the [website](#).

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 their programme of study). Depending on the security settings for each assessment students may be required to have full administrator rights on their 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 they own but not to one provided by their 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 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

Each of the programmes within the fields of Economics, Management, Finance and Social Science aims to offer a challenging, flexible scheme of study invigorated by research, which advances a student's ability to develop academic and practical insights into the subjects studied. Students will be encouraged to develop a broad range of transferable and in some cases technical expertise.

Graduates of the programmes will have a sound basis for careers in a wide range of areas from major corporations to small businesses, government organisations, the voluntary sector, international organisation and the media.

Successful completion of a degree, with Honours, may allow a student to progress to postgraduate study in the degree field or a related area or to undertake further professional qualifications.

Within the programmes there is a natural progression between the levels. A student who passes the 100 courses (FHEQ Level 4) will have the essential introduction to that subject. The 200 and 300 courses (FHEQ Level 5 and 6) build on the 100 courses and provide opportunity to develop a more detailed understanding. Although the courses may not in themselves be more difficult, students will develop a greater understanding and a sophistication of thinking as they work through the courses.

The programmes aim to:

- promote independent critical and evaluative skills, and intellectual curiosity for life-long learning;
- expand knowledge and understanding of the chosen discipline;
- promote analytical, creative and imaginative engagement with theory, research and practice in the chosen discipline;
- encourage self-development into professionally organised and interactive individuals by practicing skills of selection, assimilation and communication.

Graduate Diploma in Data Science

The programme aims to:

- provide students with a training in data science methods, with a focus on statistical perspectives.
- provide practical skills of applied data science to answer real-world problems and inform commercial and policy decisions.
- provide students with a sound knowledge of information systems management.

The learning outcomes of the programme are as follows:

Knowledge and understanding;

A student will be able to:

- formulate and build statistical and algorithmic models in a logical manner.
- demonstrate a knowledge and understanding of prediction, classification, regression and clustering.
- show a good knowledge and understanding in advanced areas of mathematics and statistics.
- apply quantitative techniques to the analysis of large and complex data.

Intellectual and cognitive skills;

A student will be able to:

- locate, extract, analyse and draw reasoned conclusions from multiple sources (including electronic sources) of appropriate literature and relevant data and acknowledge and reference these sources appropriately;
- critically analyse data and text using quantitative and qualitative techniques;
- assess the relative merits of quantitative methodologies and use them appropriately for the problem in hand.

Transferable skills;

A student will be able to:

- communicate effectively in a written context;
- use information technology (spreadsheets, word-processing and online databases) appropriately;

- organise information, and assimilate and evaluate competing arguments and methods;
- manage their own learning, including working effectively to deadlines;
- be open minded and have a capacity to handle ideas and scrutinise information in critical, evaluative and analytical ways.

Learning, teaching and assessment strategies

Most students are required to attend a full- or part-time course of instruction at a recognised teaching centre. The study materials provided are supplemented by tuition offered by the teaching centre. The University of London does not provide tuition.

For all registered students, online study materials are provided for each course studied. These include tools to assist a student in the development of the skills of information search, comprehension and analysis and the generation of original and thoughtful assignments. The study materials offer advice on how to use the recommended textbooks which form the focus of the student's studies. Most Essential Readings are available in the University of London's Online Library but students may be required to buy certain textbooks themselves.

Advice and practical information such as study techniques, planning, preparation for assessment is available in the 'Study skills' section of the Virtual Learning Environment (VLE).

Written examinations form the greater part of the assessment of the programmes. For each course students will be assessed mainly by written examination. Questions are structured to allow students to demonstrate that they have acquired appropriate knowledge and understanding. The way that students manage data, solve problems, evaluate ideas and the organisational skills they use to structure their written answers allows the standard of intellectual and transferable skills to be assessed.

Assessment criteria for the programme take into account the level at which these skills have been achieved.

Assessment methods

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

Aside from a few exceptions, each full course is examined by one three-hour unseen written assessment and each half course by one two-hour unseen written assessment. The assessment for some courses also includes a Multiple Choice Question (MCQ) element, consisting of ten questions covering the first half of the subject guide. The assessment of some courses also involves the submission of coursework or a project – in these cases, details are included as part of the course syllabus.

Examinations take place in May and October 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 Recognised Teaching Centres, examinations are normally held at established examination centres worldwide. Otherwise, the online examinations will be proctored remotely.

Please refer to the fees schedule for information about fees payable to examination centres and for your examination entry and submission.

Full details of the dates of all assessments are available on the [website](#).

Student support and guidance

- [The Virtual Learning Environment \(VLE\)](#): this gives access to materials for each course, including tutorial activities, study support resources and access to the programme of EMFSS webinars.
- 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.
- [Programme Handbook](#): this provides general information about the EMFSS programmes, including an overview of key policies and procedures.
- [Student Guide](#): This provides information which is common to all students and gives information about matters of importance from the start of a student’s relationship with the University of London through to their graduation.
- [Student Portal](#): for accessing student induction, study skills support, careers and employability resources, student wellbeing advice.
- Online course materials for each course which introduce and develop the topics.
- Reading lists are provided online. Students may need to buy their own textbooks or use copies provided by their teaching institution.
- Online discussion areas which allow students to communicate with each other.
- Past examination papers and examiners’ commentaries. These provide an indication of the format of examinations and course-level feedback on completed assessments.
- Programme Regulations: these are a set of rules which apply to your programme – students are responsible for ensuring they are familiar with the regulations for their programme.
- [The Online Library](#) provides a range of e-books, along with full-text and multidisciplinary databases where journal articles, book reviews and reports can be found. The Online Library also has a dedicated homepage for EMFSS students.
- [University of London library](#): Registered students may use the resources located within the Senate House library (for a small additional fee).
- A University of London email account and web area for personal information management.

Students must make their own arrangements to study with teaching centres which may provide full-time or part-time classes.

Attendance at a teaching centre is a requirement for students first registering on the degrees or Graduate Diplomas from 2020–2021.

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 flexible 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 qualifications 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, this 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 – whether to be undertaken at LSE or elsewhere.

Successful completion of the Graduate Diploma may allow a student to progress onto a related postgraduate degree.

Graduate employment routes

Graduates of the programmes will have a sound basis for careers in a wide range of areas from major corporations to small businesses, government organisations, the voluntary sector, international organisations and the media.

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](#).