Significant changes made to the programme regulations 2022-2023

Advice has been added in **Section 1, Structure of the programmes**: 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.

Under **regulation 2.6**, you are now strongly recommended to take DSM020 *Data Programming in Python* in the first session that you register for on the programme; and to take *DSM060 Data Science Research Topics* before registering for DSM500 Final Project.

In the **Summary table assessment, regulation 4.6**, the assessment for the new module DSM170 *Mathematics for Data Science* has been added. The final assessment for DSM160 *Social media and network science* has been c

Appendix A: DSM170 *Mathematics for Data Science* has been added as an optional module under all qualifications. The module title for DSM160 has been changed from *Social networks and graph analyso stron*

two optional modules (30 credits total)

1.4

For the award of a **PGCert Data Science** you must complete:

two core modules chosen from a list (30 credits total)

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

Data Science and Financial Technology

1.5

For the award of **MSc Data Science and Financial Technology** you 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)

1.6

For the award of **PGDip Data Science and Financial Technology,** you must complete:

four core modules (60 credits total)

three compulsory modules (45 credits total)

one optional module (15 credits total)

Data Science and Artificial Intelligence

1.7

For the award of **MSc Data Science and Artificial Intelligence,** you must complete:

four core modules (60 credits total)

three compulsory modules (30 credits total)

three optional modules (60 credits total)

a Final Project (30 credits total)

1.8

For the award of **PGDip Data Science and Artificial Intelligence,** you must complete:

four core modules (60 credits total)

three compulsory modules (30 credits total)

one optional module (30 credits total)

Over a 22 week session, a 15 credit module will typically require five to seven hours of work/effort per week, and a 30 credit module will typically require ten to 15 hours of work/effort per week.

Intermediate qualifications

1.10

If you are registered on

DSM030	Statistics and statistical data mining
DSM040	Machine learning
DSM050	Data visualisation
DSM060	Data science research topics
DSM070	Blockchain programming
DSM080	Financial markets
DSM100	Artificial intelligence
DSM110	R for data science
DSM120	Financial data modelling
DSM140	Natural language processing
DSM150	Neural networks
DSM160	Social media and network science
DSM170	Mathematics for Data Science

2 Registration

Full details of the Entrance Requirements for the programme are listed on the requirements tab of the website

Effective date of registration

2.1

Your effective date of registration will be either:

1 October, if you first register before the September registration deadline

1 April,

2.4

If you progress from individual modules to the PGCert, PGDip or MSc, you will be given a new period of registration beginning from when you register on the PGCert, PGDip or MSc.

2.5

If you transfer between the Data Science programmes and a specialism, you will not be granted a new period of registration, it will continue from the date you initially registered under these regulations.

Order in which to take the modules:

2.6

For all programmes, you can attempt the modules in any order, subject to module availability.

> Whilst you can attempt modules in any order, it is strongly recommended that:
>
> You take DSM020 *Data Programming in Python* in the first session that you register for on the programme;
>
> You take DSM060 *Data Science Research Topics* before registering for DSM500 Final Project;
>
> You have attempted the assessments for all other modules before registering for the DSM500 Final Project.

Progression within the programme

2.7

Upon successful completion of the PGCert or a PGDip offered under these regulations you may progress to a PGDip or a related MSc programme respectively. This also applies to students offered an individual module, e.g. DSM020, as an entry point, permitting them to transfer with full credit on to any of the following routes: PGCert Data Science, PGDip Data Science or MSc Data Science.

2.8

If you would like to progress to a higher award or from a standalone individual module before you have completed your current award or standalone individual module, you can be considered for progression when you have passed the first element of assessment (e.g. mid-term coursework) for the relevant module(s). If you wish to transfer before your final result is ratified and released, you must log an enquiry and notify us as soon as possible, in order to avoid delays to your progression.

3   Recognition of prior learning and credit transfer

> The rules for recognition of prior learning are set out in the General Regulations.

3.1

If you are registered for an MSc programme, you may apply for recognition of prior learning (RPL) mapped against modules up to a total of 120 UK credits.

3.2

Recognition of prior learning will not be considered for the Final Project.

3.3

If you are registered for a PGDip programme, you may apply for recognition of prior learning mapped against modules up to a total of 60 UK credits.

3.4

If you are registered for the PGCert Data Science, you may apply for recognition of prior learning mapped against modules up to a total of 30 UK credits.

4 Assessment for the programme

In line with our current General Regulations, the University may offer you

Summary table of assessment

4.6

Modules		Assessment Element 1	Assessment Element 2
Core modules	[DSM010] - Big data analysis	Coursework item 1: 30%	Coursework item 2: 70%
	[DSM020] - Data programming in Python	Coursework item 1: 30%	Coursework item 2: 70%
	[DSM030] - Statistics and		

Taking assessments

Please refer to the rules on assessment and assessment offences in the General Regulations.

4.7

When you register for a module, you must take the assessments at the first available opportunity.

4.8

Written examinations take place on two occasions each year in September and March.

Deferring an assessment

The deadlines and process for deferring a written examination are given on the VLE.

If you defer taking a written examination you have to pay a module continuation fee when you register for the session in which you wish to take the examination.

4.9

You can defer taking the written examination element of a module if you notify us by the deadline. You may only defer **once** per module. It is not possible to defer coursework submissions.

4.10

If you do not notify us of your deferral and do not attend the written examination you will be given a mark of zero for the assessment element and it will count as an attempt at the written examination.

4.11

If you defer the written examination, the mark for the coursework element of the module will be carried forward if it is 50% or more.

4.12

If you defer the written examination and your mark for the coursework element is below 50%, the rules for compensation will not apply and you must resit the coursework element.

Deadlines for items of assessment and submission guidance

See the VLE for full details of all the assessment points, deadlines and submission guidance.

4.13

All assessments must be submitted by the prescribed deadlines.

4.14

For coursework and project items, you should not exceed the maximum word limits by more than 10%. If the word count is between 10% to 20% above the maximum word limit, five marks will be deducted. If the word count exceeds the maximum word limit by more than 20%, you will receive a mark of zero for your work.

The content within the main body of text comprises the overall word count, including in-text citations, references, quotes, heading and sub-headings. The cover page, reference list and any appendices do **not** count towards the overall word count. Full submission instructions are included in the VLE with coursework submission forms.

Number of attempts permitted at an element of assessment

If you register to resit one or more elements of assessment for a module, you will be required to pay a module continuation fee. You do not have to take the assessment at the next available session; there are two sessions each year and you have five years to complete your studies.

4.15

The maximum number of attempts permitted for an element of coursework, written examination, or project report is **two**.

4.16

You will not be permitted to resit any element which you have passed.

4.17

If you fail a core module or the Final Project at the second attempt your registration on the programme will cease.

4.18

If you fail a compulsory module at the second attempt, and your mark cannot be compensated, your registration on the programme will cease.

4.19

University of London, and provide a supporting medical certificate or other official documentation for the modules affected.

> The documentation must be received within three weeks of the last written examination, or
>
> the [General Regulations](#)).

5   Transfer of Registration

Transfer between programmes offered under these regulations

5.1

All requests to transfer between programmes offered under these regulations will be considered by the Programme Director on a case-by-case basis.

5.2

You may apply to transfer between equivalent programmes offered under these regulations provided that

> you have selected, or are still able to select, the core and compulsory modules on the programme to which you wish to transfer;
>
> you are still within your maximum period of registration AND
>
> you are not yet eligible for the award for the programme on which you are currently registered

5.3

If you transfer between MSc programmes we will credit you with any modules that you have already passed and any RPL that we previously awarded you provided they form part of the structure of your new programme.

5.4

If you have been awarded credit for a module, we will not allow you to resit it upon transfer.

5.5

Any failed attempts made will be carried forward and will be counted towards the number of attempts permitted at the same modules following transfer.

5.6

If you are permitted to transfer between MSc programmes offered under these regulations, all modules studied will be displayed on your final transcript when you receive your award. This includes modules which are discarded upon transfer.

Exit qualifications

6.8

If you are registered on an MSc or PGDip programme and are unable to complete your programme of study, an exit qualification (i.e. a PGCert or PGDip) may be granted for the successful completion of 60 or 120 credits respectively.

6.9

All exit qualifications are granted at the discretion of the exam board.

6.10

If you are registered on a specialist MSc programme and cannot complete your programme of study, you may be awarded a PGDip in line with your named specialism, providing you have completed the modules listed in Appendix A. If you have not completed the modules listed but have obtained enough credits, you will be awarded a PGDip Data Science.

6.11

If you complete 60 credits, you may only be awarded a PGCert Data Science.

6.12

The award of the exit qualification will be with effect from the year in which you satisfied the requirements for that award.

6.13

If you accept a PGCert or PGDip as an exit qualification under these regulations, we will not permit you to register or re-register for the related MSc at a later date.

6.14

If you have transferred from stand-alone modules to a MSc and you are unable to complete your programme of study,

Appendix A   Structure of the qualifications

Foundations of Data Science: K-Means Clustering in Python

Data Science modules assume rudimentary experience with programming in Python.

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PGCert Data Science

For the award of a **PGCert Data Science** you must complete:

Two core modules chosen from the below list (30 credits total):

> Big data analysis [DSM010]
>
> Data programming in Python [DSM020]
>
> Statistics and Statistical Data Mining [DSM030] [1]

PGCert Data Science

MSc Data Science and Financial Technology

For the award of an **MSc Data Science and Financial Technology** you must complete:

Four core modules (60 credits total):

> Data programming in Python [DSM020]
>
> Statistics and Statistical Data Mining [DSM030]

MSc Data Science and Artificial Intelligence

For the award of an **MSc Data Science and Artificial Intelligence** you must complete:

Four core modules (60 credits total):

PGDip Data Science and Artificial Intelligence

For the award of a PGDip Data Science and Artificial Intelligence you must complete:

Four core modules (60 credits total):

> Data programming in Python [DSM020]
>
> Statistics and Statistical Data Mining [DSM030] [1]
>
> Machine learning [DSM040]
>
> Artificial intelligence [DSM100]

+

Three

PGDip Data Science and Artificial Intelligence

Appendix B   Module Outlines

Topics covered in each module may be revised to ensure currency and relevance. Students will be advised of any changes in advance of their study. See module descriptors under the Structure tab on the website for further information and any updates.

Foundations of Data Science: K-Means Clustering in Python

Data Science modules assume rudimentary experience with programming in Python.

We have designed a non-credit bearing, optional module, for students with no prior Python experience. The module should take no more than 30 hours, and ensures that you are ready to

acquired in other modules in the implementation of your Final Project. The work will consist of a combination of research and highly applicative elements in various proportions. For your project work you can make use of methodologies from various components of Data Science as instruments of research.

Final Project Assessment

1. Coursework

The project will be submitted as a sequence of deliverables. These will include, but not be limited to:

> Project proposal
>
> Preliminary project report
>
> Weekly progress logs
>
> Final P

Appendix C   Assessment Criteria

This is an indicative description of expectations at each grade level. Overall grades comprise qualitative and quantitative elements. The setting of questions, tasks and requirements and the accompanying marking scheme should take account of the criteria below.

Distinction (80+%)

An answer falling into the mark range 80+% demonstrates:

very significant ability to evaluate critically existing methodologies and suggest new approaches to current research or professional practice;

very high levels of creativity, originality and independent thought;

very significant ability to plan, organise and execute independently a research project, coursework assignment or examination question;

very significant ability to evaluate literature and theory critically and make informed judgements;

very significant ability to analyse data critically;

outstanding levels of accuracy, technical competence, organisation and expression.

Distinction (70-79%)

An answer falling into the mark range 70 to 79% demonstrates:

a capacity to develop a sophisticated and intelligent argument;

clear evidence of wide and relevant reading, referencing and an engagement with the conceptual issues;

original thinking and a willingness to take risks;

a significant ability to plan, organise and execute independently a research project, coursework assignment or examination question;

rigorous use and a sophisticated understanding of relevant source materials, balancing appropriately between factual detail and key theoretical issues. Materials are evaluated directly and their assumptions and arguments challenged and/or appraised;

significant ability to analyse data critically;

correct referencing.

Merit (60 to 69%)

An answer falling into the mark range 60 to 69% demonstrates:

a detailed understanding of the major factual and/or theoretical issues and directly engages with the relevant literature on the topic;

strong evidence of critical insight and thinking;

a capacity to develop a focused and clear argument and articulate clearly and convincingly a sustained train of logical thought;

an ability to plan, organise and independently execute a research project, coursework assignment or examination question;

an ability to analyse data critically;

clear evidence of planning and appropriate choice of sources and methodology with correct referencing.

Pass (50 to 59%)

An answer falling into the mark range 50 to 59% demonstrates:

a reasonable understanding of the major factual and/or theoretical issues involved;

evidence of some knowledge of the literature with correct referencing;

examples of a clear train of thought or argument;

an ability to plan, organise and independently execute a research project, coursework assignment or examination question;

how to introduce and appropriately conclude a text.

Fail (40 to 49%)

Fails to meet the minimum requirements of the assessment criteria. An answer falling into the mark range 40 to 49% demonstrates:

some awareness and understanding of the literature and of factual or theoretical issues, but with little development and/or irrelevant/unrelated material or arguments included;

a limited ability to present a clear and coherent argument;

a limited ability to plan, organise and execute a research project, coursework assignment or examination question;

a limited ability to analyse data;

incomplete referencing.

Fail (20 to 39%)

Fails to meet the minimum requirements of the assessment criteria. An answer falling into the mark range 20 to 39% demonstrates:

clear conceptual or factual errors or misunderstandings;

only fragmentary evidence of critical thought or data analysis;

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