

## FAQ for Data Science (part-time)

### How many modules will I take each semester?

The part-time version of the MSc Data Science programme has been designed to allow students to take two modules per semester and it will provide additional time for students to study the taught material and to complete their assessments.

The modules of the part-time version run in parallel to the full-time programme. This provides a high level of flexibility for our part-time students in taking on more modules when possible; taking fewer modules if they want to extend the length of their programme.

### What is the mode of delivery of the programme?

Each part-time module is normally taught in 3-week blocks, with additional 2 or 3 weeks to complete the coursework. In the first two weeks of each module students will engage with material designed for remote engagement (such as short videos, reading tasks, quizzes, problem-solving activities and coding tasks, where appropriate).

This material will be on-demand to allow students to proceed at their own pace and convenience. On-demand material will be complemented by live Question & Answer sessions with the teaching team each week, offering opportunities to clarify and discuss the material provided.

For the Research Methods module and for those modules with a lab component, intensive “module enhancement day(s)” will follow in week 3 of those modules; this will normally be in-person, either at the Loughborough or at the London campus, depending on the module.

Depending on the module, there might be also an opportunity to join the “module enhancement day(s)” remotely, although this will need to be agreed on a case-by-case scenario and it might be possible only on certain modules.

### What are module enhancement day(s)?

For the Research Methods module and for modules with a lab component, intensive “module enhancement day(s)” will follow in week 3 of those modules; this will normally be in-person, either at the Loughborough or at the London campus, depending on the module.

Depending on the module, there is also an opportunity to join the “module enhancement day(s)” remotely, although this will need to be agreed on a case-by-case scenario and it might be possible only on certain modules. The “module enhancement days” will last 1 to 2 days depending on the module.

### Which modules have “module enhancement days”?

Currently, we are planning module enhancement days for the following modules:

- Research Methods
- Introduction to Data Science
- Programming for Data Science
- Statistical Methods and Data Analysis
- Cloud Applications and Services

### Where will my *base* be and how do I choose?

The part-time version of the MSc Data Science has been designed keeping in mind the high level of flexibility requested by our applicants. Students can attend the course from their office/home, from a location of their own choice, including from our London campus.

Part-time students will choose a base campus (either Loughborough or London) at which they would like to access academic support (library, student support services, personal tutor) etc.

### What support will I get during my studies?

A Personal Academic Tutor will support each student during their learning journey. All students will meet with their personal tutor within the first few weeks of each academic year (whether remotely or

in person this needs to be agreed between student and supervisor), and then at regular intervals, for example after the release of exam results, or to discuss specific issues.

Lecturers will be the primary port of call for module specific questions. On-demand material will be complemented by live Question & Answer sessions with the teaching team each week, offering opportunities to clarify and discuss the material provided. The [Mathematical Learning Support Centre](#) Offers support both in mathematics and statistics, particularly for those students who might have been away from learning for a while and would like to brush up their numeracy skills.

### **How will personal tutoring work? Will I be able to meet my tutor in person or online?**

Each student will have a personal tutor, based in their chosen 'base' campus. Student and tutor will decide together whether to meet in person or online, or a mix mode.

All students should meet their personal tutor within the first few weeks of each academic year (whether remotely or in person this needs to be agreed between student and supervisor), and then at regular intervals, for example after the release of exam results, or to discuss specific issues.

### **What is the typical programme timetable/programme structure?**

#### **Year 1**

In Year 1 Semester 1, students will study two compulsory modules: **Introduction to Data Science** and **Programming for Data Science**. These two core data science modules will introduce students to data science concepts, statistical techniques, and programming skills needed for a role as a data scientist, in addition to providing them with the background knowledge needed for all optional modules.

Then, in Year 1 Semester 2 students will undertake the compulsory **Research Methods** module and an optional module that will be either **Data Mining** or **Stories as Data**.

#### **Year 2**

In Year 2 Semester 1, students will undertake the compulsory module **Data Governance and Ethics**, and this is an important module because it provides students with vital knowledge related to the ethical aspects of collecting, processing and storing data. The students will take one option module that will be either **Statistical Methods and Data Analysis** or **Building Data Driven Strategy**.

In Year 2 Semester 2 students will take the compulsory module **Artificial Intelligence and Big Data** and one optional module from **Applied Machine Learning, Design-thinking for AI-driven Service**, and **Cloud Applications and Services**.

The **Data Science Project** module starts in year 2, Semester 1, continues with the submission of a research proposal at the beginning of Semester 2 and culminates with the dissertation towards the end of Semester 3.

### **When is module selection?**

Part-time students in receipt of a tuition fee loan need to have a study agreement in place before they start the programme which will outline their modules for each semester and year of study. Students can seek advice from their personal tutor and/or programme director when making their optional module choices. Module choice meetings will take place for all students to attend and ask question about the different modules.

### **Where can I find the module specs?**

Details of each module can be found online

<https://lucas.lboro.ac.uk/epublic/wp5016.main?dept=CO&dept2=CO>

### **Who can help me decide which modules to choose?**

Students can seek advice from their personal tutor and/or programme director when making their optional module choices.

### **When will I start my project?**

Part-time students start their project in year 2, Semester 1; this is a gentle start, resulting in an outline of their project at the beginning of Semester 2 (Research Proposal accruing a small percentage of the 60 credit); the bulk of the project will be then completed in year 2, Semester 3.

### **What project topics are data science students undertaking?**

Below are a few of the projects undertaken by full-time Data Science students last academic year:

- machine learning based performance indicator for rugby union
- deep learning for human pose estimation in sports
- text analysis for fake news detection
- predicting skin cancer from medical data and predicting crime using time and location data
- equality, diversity and inclusion at Loughborough University: storytelling to inform better decision-making
- machine learning for wildlife conservation
- deep learning for digitalising manufacturing work-places
- early prediction of bankruptcy of companies using machine learning
- animal behaviour analysis using deep learning
- police crime data analysis for the impact of covid-19
- property sales data analysis for the impact of covid-19

Students are encouraged to propose their own projects.

### **Will there be any internship opportunities?**

We will circulate some internship opportunities provided by our partners, and students will need to apply for those internships by following the process defined by each company. Students will also be provided with support from careers in seeking other internships.

### **What are the entry requirements for the MSc Data Science programmes?**

A 2:2 honours degree (or equivalent international qualification) in any discipline (except computer science). If you have a computer science degree but you are not confident in your programming or statistical skills then please apply and we will consider your application on a case-by-case basis.

### **What jobs can I apply for with my MSc Data Science degree?**

The kinds of positions we would anticipate graduates of this programme gravitating towards would include roles in analytics engineering, big data engineering and business intelligence, and as data managers, data architects, data analysts and data scientists.