WHY AN MSc MATHEMATICS AND DATA SCIENCE

The field of Data Science has seen rapid growth in recent years, with vast amounts of data now being generated by major companies and service providers. There’s now a shortage of mathematics graduates with the data analysis skills needed to meet the demands of industry.

Our MSc Mathematics and Data Science is one of the first courses to link the two key areas of mathematics and data science, making it uniquely positioned to help our graduates meet this demand. The course will provide you with a solid foundation in the mathematical analysis of data-driven systems and help you develop your computing skills to apply the techniques you learn on a large scale. You’ll learn the techniques used to approach data using computational analysis and understand the mathematics underpinning these techniques. The course covers:

• statistical analysis techniques for small and large datasets
• developing models of real-life systems
• mathematical analysis of data networks, e.g. social media networks
• analytical and numerical optimisation approaches to real-life systems
• manipulating data and scripting in Python
• data analytics and machine learning
• real-life applications, with guest lectures from science and industry

Managing and making sense of Big Data requires a combination of specialist skills and knowledge – such as mathematical, statistical and computer programming techniques.

WHY STUDY AT STIRLING

The University of Stirling is 1st in Scotland and 3rd in the UK for graduate employment and 98% of our postgraduate leavers are in employment or further study within six months of graduating. The industrial experience of our staff and the guest lecturers on the course ensure your experience is practical and applied. Industrial dissertation projects often lead straight to a job with the partner company.

The course is part of a large Data Science Portfolio at Stirling: MSc Big Data, MSc Financial Technology (Fintech), MSc Data Science for Business and MSc Mathematics and Data Science.

Networking opportunities
Many of our postgraduate students come from overseas. Studying at Stirling offers an excellent opportunity to establish your own network of contacts at the outset of your career.
ENTRY REQUIREMENTS

A minimum of a second class Honours degree, or equivalent, in either a mathematics (joint or single honours) or other numerate subject, e.g. physics. Other degrees will also be taken into account, if it can be shown that some mathematical study took place and you have taken and passed advanced mathematics modules in at least some of calculus, algebra, statistics and numerical analysis. Applicants without these formal qualifications but with significant and appropriate work/life experience are encouraged to apply.

If English is not your first language you must provide evidence of your proficiency such as a minimum IELTS score of 6.0 (5.5 in all bands).

KEY INFORMATION

Degree type: MSc
Study method: full-time (one year) or part-time (two years)
Start date: September
Course length: One year

CONTACT INFORMATION

Course Director: Dr Andrew Hoyle
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If you would like to know more about the course contact:
stir.ac.uk/1if

Learn more about the course modules at stir.ac.uk/1if

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