Modern AI is concerned with giving computers human-like abilities such as sight, learning, conversation and creativity. AI is a popular topic to study because there is a growing jobs market for AI and Data Science skills and because it is an exciting new field of computing.

Our data driven MSc Artificial Intelligence course capitalises on the success of well-established postgraduate courses in Big Data and Data Science for Business preparing industry ready graduates sought after by AI companies.

This course covers the theoretical underpinning of a wide variety of AI-related techniques including machine learning and deep learning, mathematics and statistics for data science, programming using Python, computer vision and natural language processing. The course also covers the technology, techniques, tools, software and methodologies used to apply these underlying theories to real-world problems.

WHY STUDY AN MSc ARTIFICIAL INTELLIGENCE?

Course Modules
- Mathematical Foundations
- Statistics for Data Science
- Representing and Manipulating Data
- Commercial and Scientific Applications
- Data Analytics
- Deep Learning for Vision and NLP
- Stochastic Processes and Optimisation

WHY STUDY AN MSc BIG DATA?

The Stirling MSc Big Data has been developed in partnership with global companies who employ data scientists. Over 90% of our students find work or further study within 6 months of finishing the course in diverse sectors such as banking and finance, health services, data science consultancy, data driven marketing and even sports science.

The course features a long summer project, where possible in partnership with a company or external organisation that provides students with a showcase of their skills to take to employers or launch online.

The MSc Big Data is a mix of practical technology such as Hadoop, NoSQL and Map-Reduce, important maths and computing theory, and advanced computational techniques. The course will teach you what you need to know to collect, manage and analyse big, fast moving data for science or commerce.

Course Modules
- Mathematics for Data Science
- Statistics for Data Science
- Big Databases
- Big Data Analytics
- Hadoop and MapReduce
- Scientific and Commercial Applications
- Python Scripting

Contact information
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FOR FURTHER INFORMATION ON COURSE CONTENT VISIT:
stir.ac.uk/2t9

FOR FURTHER INFORMATION ON COURSE CONTENT VISIT:
stir.ac.uk/1i7
WHY STUDY AN MSc FINANCIAL TECHNOLOGY?

Banking and finance are undergoing a revolution driven by new technology and changes to regulations. New cryptocurrencies such as Bitcoin and Ethereum are changing the way people hold money and are driving a new boom in investment. Mobile currencies such as M-Pesa are empowering people across the world who would otherwise not have access to banking facilities.

This course has been developed in partnership with global organisations specifically to provide the skills that employers in the fintech industry need. Companies such as HSBC, Sainsbury’s Bank, JP Morgan and MBN helped shape the course with employability firmly in mind.

This advanced taught postgraduate course combines the technology from big data and analytics, mobile computing and modern financial services.

Course Modules
- Blockchain Technology
- Cyber Security
- Contemporary Issues in Banking
- Relational and Non-relational Databases
- Representing and Manipulating Data
- Data Analytics
- Finance Apps and Open Banking
- Investment Regulation and Ethics
- Behavioural Finance
- Innovation Management
- New Venture Creation
- Professionalism, regulation and ethic in banking

WHY STUDY 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

Contact information
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FOR FURTHER INFORMATION ON COURSE CONTENT VISIT: stir.ac.uk/1i4

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“Data Scientist: The Sexiest Job of the 21st Century”
HARVARD BUSINESS REVIEW
October 2012
Five Reasons YOU SHOULD STUDY AT STIRLING

Industry driven courses
The courses have been designed in collaboration with employers to ensure you get the right skills for a job in big data, data science, or artificial intelligence.

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 with students and industry professionals.

Wide range of expertise
The courses provide a solid foundation in computing technology, financial theory, business skills, and mathematics.

Beautiful campus environment
University of Stirling campus is 1st in the UK for campus environment according to the International Student Barometer, 2016.

Large community of data scientists
Our academics are engaged in world leading research in fields such as complex systems modelling, computer vision, machine learning, optimisation and, of course, artificial intelligence.

CAREER OPPORTUNITIES

Organisations are increasingly using and collecting larger amounts of data during their everyday operations. From predicting what people will buy to tackling environmental and organisational issues, your job is to analyse, visualise and interpret large amounts of data to find patterns and help solve the problems faced by businesses in innovative ways. Data Scientists work across a range of areas including finance, health, retail, food, scientific research agriculture etc.

Graduates from a data science course find employment as:
- R&D data scientist
- Digital Analytics Engineer
- Data Engineer
- Data Scientist
- Machine Learning Engineer
- Machine Learning Data Scientist

Graduates with an AI qualification will find employment in sectors such as:
- Business or Customer Analytics
- Robotics
- Advanced Healthcare
- Financial Technology (Fintech)
- Legal Technology (Lawtech)
- Automotive (self-driving cars)
- Cyber Security
- Social Media
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.

ENGLISH REQUIREMENTS

If English is not your first language you must have the following qualification as evidence of your English language skills: IELTS: 6.0 with 5.5 minimum in each skill.

If you don’t meet the required score you may be able to register for one of our pre-sessional English courses.

SCHOLARSHIPS

There are a number of scholarships available to support your studies. You may qualify for University funding as well as funding from governmental bodies, the European Commission, funding trusts, research councils, employers and industry. Scholarships finder: stir.ac.uk/scholarships