APPLIED MATHEMATICS
BSc (Hons)

ARE YOU STIRLING?
WHY STUDY APPLIED MATHEMATICS?

Mathematics is not just about knowledge and numbers. It’s about gaining transferable skills such as critical thinking, problem solving, analysis of data/information, experimental and project design as well as communication and teamwork skills that will make you a desirable candidate to your future employers.

As part of the course you will have the opportunity to use the mathematics computing laboratories as an integral part of your learning process, making your study as much experimental as theoretical. This course focuses on the foundation of the mathematics and statistics with a strong emphasis on real-world applications.

The teaching in class is informed by our internationally recognised research undertaken by academics that are experts in the field of mathematics and statistics. The BSc Applied Mathematics covers the same areas of mathematics as the BSc Mathematics but specialises in more areas of applied mathematics in Years 3 and 4.

REASONS TO CHOOSE THIS COURSE

1. MORE THAN JUST A DEGREE
Employers increasingly look for research experience and extracurricular activities in addition to a good degree. We have been entering teams of students in ‘The Mathematical Contest In Modeling’ with great success since 2011. This offers students the chance to develop skills that employers are looking for. We also offer summer placements either with staff or companies.

2. ACTIVE IN RESEARCH
We are an active research Institute, with funded research from the UK Engineering and Physical Sciences Research Council (EPSRC) of over £1.4m, as well as funding from the European Union FP7 Programme, other UK Research Councils and funding agencies.

3. EXTERNAL IMPACT
We’re ranked in the top 5 in Scotland for Mathematics (The Guardian University Guide 2019)

COURSE DETAILS

You will take Mathematics plus two other subjects in Year 1.

Semesters 1 – 3
Year 1 teaching has been designed to make the transition from school to university as smooth as possible, with the material covered at secondary level reviewed, consolidated and applied before being developed further.

You will take core modules in the following:
- Programming: Python, R, Matlab, LaTeX
- Calculus of one and several variables: differential equations
- Vectors, matrices, complex numbers and their application in geometry and systems theory
- Statistics and probability: exploratory data analysis and hypothesis testing

Semesters 4 – 8
The Mathematics Honours course covers a broad range of skills. You will take advanced modules covering the following key areas:
- Mathematical techniques for solving a wide range of problems
- The theory underlying these mathematical techniques
- Model-building, i.e. converting real-world problems into mathematical form, and how to solve such problems using a computer
- Statistical data analysis
- The incorporation of real-world features such as uncertainty into mathematical models
- Multivariate methods and statistical inference. This will include projects that allow further development of skills in areas of applied mathematics.
CAREER OPPORTUNITIES
There is a growing need for graduates with mathematical skills in business, research and the sciences. This course provides both the theoretical background and the quantitative skills you need to solve real-world problems.

Our graduates find employment as:
- Actuarial analyst
- Chartered accountant
- Data analyst
- Data scientist
- Investment analyst
- Research scientist
- Secondary school teacher
- Statistician
- Systems developer

THIS COURSE ACHIEVED 92% STUDENT SATISFACTION
(National Student Survey 2018)

“_the University of Stirling is 3rd in the UK and 1st in Scotland for graduate employability with almost 97% of our graduates in employment or further study within six months of graduating.”
(HESA 2016)
CONTACT

Dr Anthony O’Hare
Course Coordinator
T: +44 (0) 1786 467427
E: anthony.ohare@stir.ac.uk

Dr David Cairns
Advisor of Studies
T: +44 (0) 1786 467445
E: david.cairns@stir.ac.uk

W: stir.ac.uk/1pv
W: cs.stir.ac.uk

Student Recruitment and Admissions
T: +44 (0) 1786 467046
E: recruitment@stir.ac.uk

stir.ac.uk/65

JOIN OUR COMMUNITY

ARE YOU STIRLING?