Mathematical Sciences

#BelongatBath

UNIVERSITY OF BATH

Open Day June 2025

Department of Mathematical Sciences

Prof. Alastair Craw

I'll run a short Q&A at the end with a current undergraduate student, but you're welcome to ask questions during the presentation.

Degree courses in Mathematical Sciences for 2026 entry

Available programmes:

Single honours:

- Mathematics;
- Mathematics & Statistics;
- Mathematics, Statistics & Data Science.

We plan to bring 270 students to Bath, roughly 30 of whom study a degree programme in Mathematics, Statistics and Data Science.

Joint honours (run by other departments):

- Computer science and Mathematics;
- Economics and Mathematics;
- Mathematics and Physics.

Available programmes:

Single honours:

- Mathematics;
- Mathematics & Statistics;
- Mathematics, Statistics & Data Science.

Further Mathematics at A- or AS-level is required for the first two, but it's not required for the third.

~~**Joint honours (run by other depts):**~~

~~- Computer science and Mathematics;~~
~~- Economics and Mathematics;~~
~~- Mathematics and Physics~~.

Available degrees:

3 year Bachelor of Science (BSc)

4 year Master of Mathematics (MMath)

Options:

Our BSc and MMath degrees each allow for:

- Study Abroad;
- a Professional Placement.

These options add one year to the degree (except Study Abroad on the MMath degree).

You may switch freely between these options in Year 1 (sometimes later) with one caveat.

Entry requirements

Our *typical* offer at A-level is

A*A*A

including A* in Mathematics, but this is only a headline…

Mathematics or Mathematics & statistics:

Our typical offer is A*A*A, including A*A in Mathematics and Further Mathematics;

Our alternative offer is A*AA or A*A*B, inc A*A in Mathematics and Further Mathematics plus a grade A in EPQ. Also, a Welsh Bacc offer.

A reduced contextual offer of A*AB may apply depending on your personal circumstances.

If you have AS level Further Mathematics only, then our typical offer is A*A*A, including A* in Mathematics plus A in AS-level Further Mathematics, as well as grade 2 in STEP or a Merit in GCE AEA Maths.

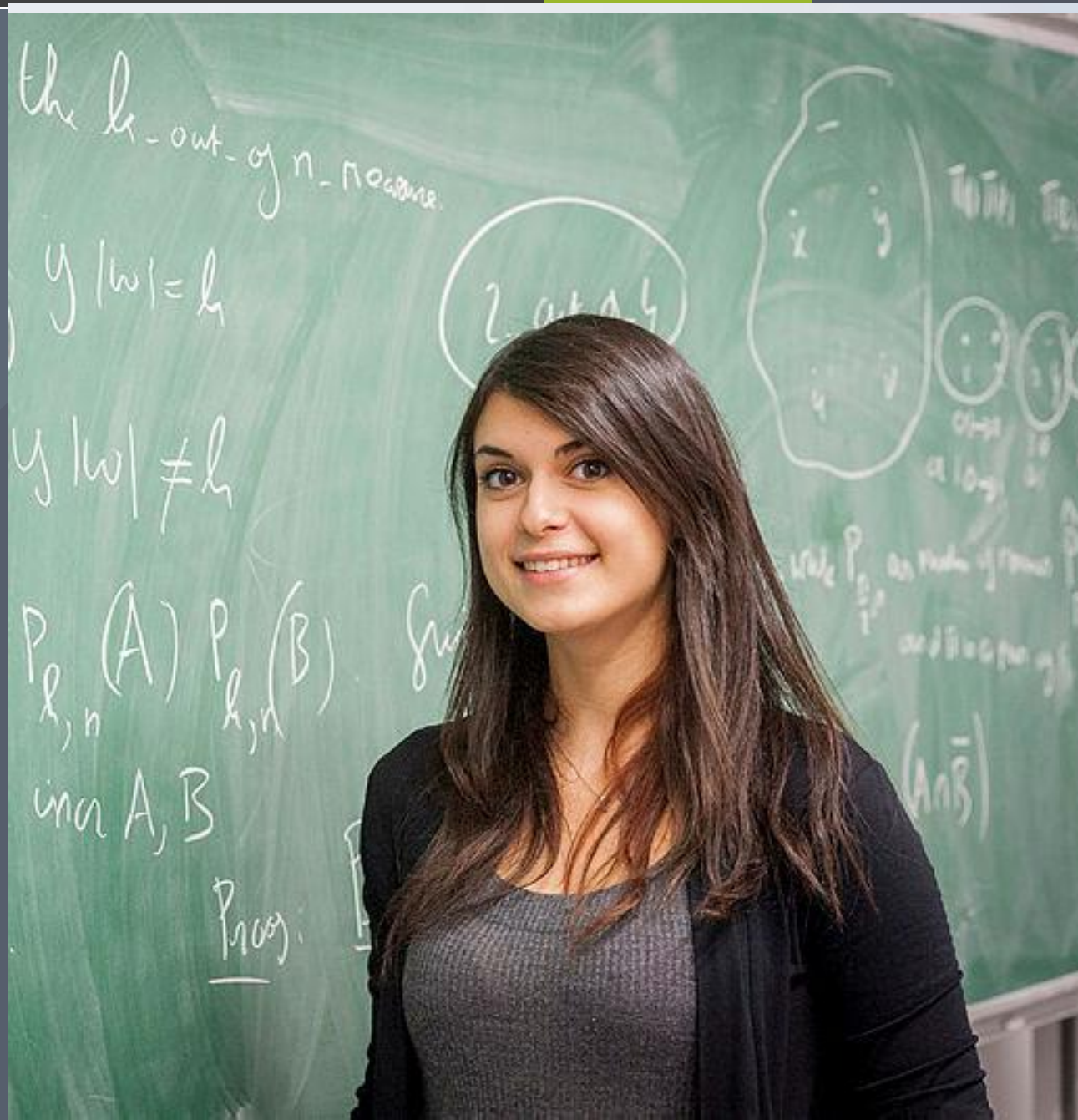
Maths, Stats and Data Science:

Without Further Mathematics at A-level, our typical offer is A*A*A, inc. A* in Mathematics and A in a second quantitative subject.

Our alternative offer is A*AA or A*A*B, inc. A* in Maths and A in a quantitative subject, plus a grade A in EPQ. Also, a Welsh Bacc offer.

With Further Mathematics at A-level, our typical offer is A*AA or A*A*B, including A* in Mathematics and B in Further Mathematics, reducing to A*AB with EPQ / Welsh Bacc.

Again, a reduced contextual offer may also apply depending on your circumstances.



Structure of our courses

Structure of the academic year

- Two semesters, with exams at the end of each semester. Some courses are assessed wholly or partly by coursework.
- Each semester, students in Year 1 attend the following each week:

  10 lectures

  4 examples classes / lectures / lab

  5 small-class tutorials

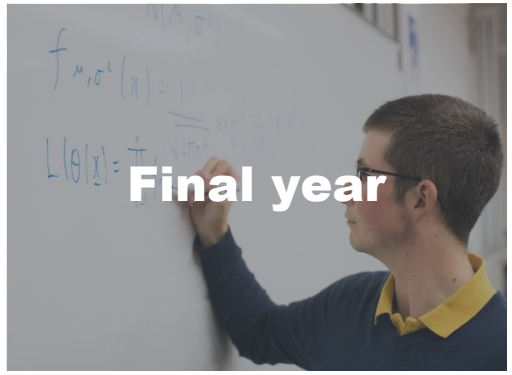
  We anticipate that 3 of these 19 hours will be online in 2026.

A typical week – example timetable

		9:15	10:15	11:15	12:15	13:15	14:15	15:15	16:15	17:15
Monday			**Lecture**	**Tutorial**		**Lecture**	MASH drop in			**Lecture**
Tuesday			**Tutorial**	**Tutorial**	**Lecture**				**Lecture**	
Wednesday		**Online Examples class**		**Online Lecture**	**Online Examples class**					
Thursday		**Lecture**			**Lecture**	**Tutorial**		**Lecture**		
Friday		**Tutorial**	**Lecture**				**Lecture**	**Examples class**		


VANS

Structure of the courses



Year 1

Mathematics (or Mathematics & Statistics):

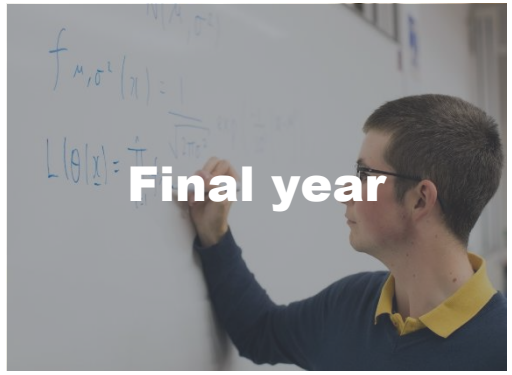
You'll study Pure Mathematics (50%):

- Algebra (20%);
- Analysis (20%);
- Foundations and Connections (10%).

Also Applied Mathematics (50%):

- Multivariable calculus, differential equations, vector calculus and mechanics (20%);
- Probability and Statistics (20%);
- Programming in Python (10%).

Structure of the courses



Year 1

Mathematics, Statistics and Data Science:

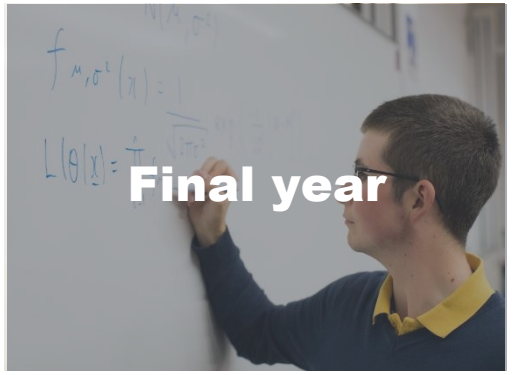
Study Core Pure and Applied Maths (50%):

- Algebra (20%);
- Multivariable calculus, differential equations, vector calculus and mechanics (20%);
- Sequences and functions (10%).

Also Statistics and Data Science (50%):

- Probability and Statistics (20%);
- Programming and Data Science (20%);
- Foundations and Connections (10%).

Structure of the courses



Year 2

Mathematics: No core units; students choose from an extremely broad range of topics in pure maths, applied maths, probability, data science and statistics.

Mathematics & Statistics: Core units in Statistics, plus a broad choice across pure and applied mathematics.

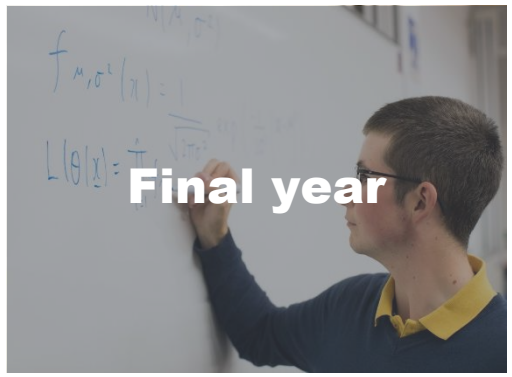
Mathematics, Statistics & Data Science: Core units in each of:

- Data science;
- Differential equations and vector calculus;
- Machine learning; and
- Statistics.

Plus some choice across pure and applied mathematics.

In addition: students may a choose a lecture course (16.6%) from one of our partner departments.

Structure of the course

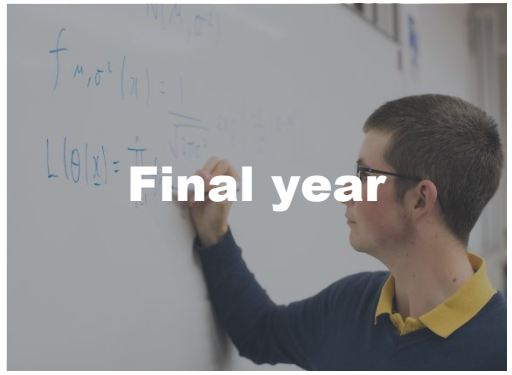


Year 3

Options on our degrees:

- A standard year of study on campus in Bath (tuition 100%).
- Studying abroad (tuition 15%), i.e. be *a student at another university for up to a year*. Both BSc and Mmath degrees are 4 years.
- Professional placement (tuition 20%), i.e. *work in a company for up to a year*.

Structure of the course

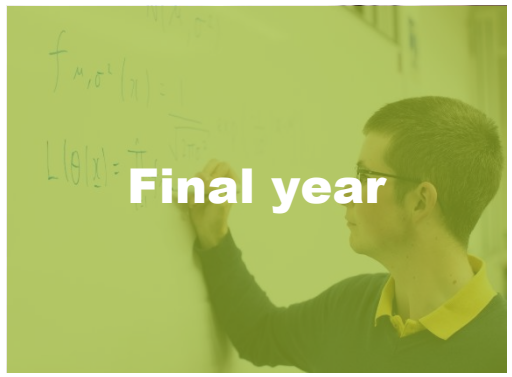


Year 3 : study abroad locations

Austria (Wien)
France (Grenoble, Bordeaux)
Finland (Helsinki)
Germany (Hamburg, München, Berlin)
Poland (Kraków)
Spain (Madrid, Zaragoza)

Australia (Queensland, Western Australia),
Canada (Dalhousie, Simon Fraser),
China (City Univ. Hong Kong)
Mexico (UNAM),
New Zealand (Canterbury)
Singapore (National Univ., Nanyang Technological Univ.)
South Africa (Stellenbosch)
South Korea (Yonsei Univ.)
USA (SUNY Binghamton, Lincoln, Purdue, Virginia)

Structure of the course



Final year

Mathematics (or Mathematics & Statistics):

- No compulsory units for Mathematics, an extremely broad range of options across pure maths, applied maths, probability, statistics, data science, machine learning (and options from partner departments).
- *Mmath students do a compulsory project*.

Mathematics, Statistics and Data Science:

- A project in `Applied data science' , plus core units in `Statistical modelling and data analytics' and `Machine learning' (50%).
- A range of options across pure maths, applied maths, probability, statistics, data science, machine learning (as well as options from partner departments).

On Professional Placements

Recent Placement Providers for Mathematical Sciences

(you apply directly to employer)

Why do a professional placement?

- Evaluate potential careers: test whether a given career is right for you and begin to establish a professional network.
- Potential job offer: many of our students return from placement with a firm job offer or the offer of a fast-track application.
- Earn some money: the average salary of our placement students is £25.3k; the range in 2025/26 is £0k (one person)-£65k.
- Transferable skills: placement students are often better prepared for final year, with improved time management and teamwork.

(Mathematics student Henrietta Forssen on placement at DEFRA)

Location of placements 2025/26 Maths

Safe and supportive atmosphere:

- Director of Studies team embed supportive departmental ethos, leading to our Dept. rated `3rd for Continuation' in CUG 2026;
- Our department holds an Athena Swan (Gender charter) Gold Award (from 2025);
- Bath rated the `third safest city in England and Wales' (out of 41 towns and cities) according to the most recent CUG survey;
- MASH provides up to 6 hours per week where students can ask maths questions, while student services provide support for mental health across campus.

Why study Mathematical Sciences in Bath?

1. We offer a tremendous choice of topics from year 2 onwards on our traditional Mathematics programmes.
2. Our applied programme in Maths, Stats and Data Science provides many key practical skills sought by employers.
3. Freedom to switch between any programmes in the Dept of Mathematical Sciences (with one caveat), including our Professional Placement that we've run for over 60 years.
4. Bath is a beautiful and safe place to live, with world-class sports facilities on campus.
5. Complete University Guide 2026 rates:
    - the University as 8th in the UK overall;
    - Mathematics at Bath as 7th in the UK, and we're 3rd for `continuation' & joint 6th for graduate prospects.

Complete University Guide (2026)

Mathematics in the UK listed on the Complete University Guide

University ranking	University name	Overall score	Entry standards	Student satisfaction	Research quality	Graduate prospects
1	University of Cambridge VIEW COURSES →	100%	90%	82%	93%	87%
2	University of Oxford VIEW COURSES →	100%	90%	78%	94%	93%
3 ▲ 2	University of St Andrews VIEW COURSES →	99%	100%	83%	86%	87%
4 ▼ 1	Imperial College London VIEW COURSES →	98%	85%	81%	92%	89%
5 ▼ 1	University of Warwick VIEW COURSES →	97%	81%	82%	91%	87%
6 ▲ 5	University of Bristol VIEW COURSES →	97%	78%	79%	92%	90%
7	University of Bath VIEW COURSES →	97%	79%	80%	87%	89%
8	London School of Economics and Poli... VIEW COURSES →	96%	76%	76%	88%	92%
9 ▲ 1	Durham University VIEW COURSES →	96%	85%	78%	82%	88%
10 ▼ 4	UCL (University College London) VIEW COURSES →	95%	71%	79%	85%	87%

Credit: Screenshot accessed March 2025

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