

Pure Mathematics MRes

Postgraduate combined research and teaching degree programme Pure Mathematics MRes:

This programme involves both taught classes in Pure Mathematics and a substantial MRes thesis which accounts for almost two-thirds of the total degree.

The MRes can be used as the first phase of our fast track PhD programme, in which the MRes thesis is extended over a further period of two years into a PhD thesis.

[Study here and find out why the University of Birmingham was awarded The Times and The Sunday Times University of the Year 2013-14 \(http://www.birmingham.ac.uk/news/latest/2013/09/20-sep-Birmingham-announced-as-University-of-the-Year.aspx\)](http://www.birmingham.ac.uk/news/latest/2013/09/20-sep-Birmingham-announced-as-University-of-the-Year.aspx)

Course fact file

Type of Course: Combined research and taught

Study Options: Full time, part time

Duration: 12 months minimum full-time; also available part-time over 2 years

Start date: September/October

Related courses

[Applied Mathematics MRes \(/postgraduate/courses/combined/maths/applied-mathematics-mres.aspx\)](/postgraduate/courses/combined/maths/applied-mathematics-mres.aspx)

[Management Mathematics MRes \(/postgraduate/courses/combined/maths/management-mathematics-mres.aspx\)](/postgraduate/courses/combined/maths/management-mathematics-mres.aspx)

[Statistics MRes \(/postgraduate/courses/combined/maths/statistics-mres.aspx\)](/postgraduate/courses/combined/maths/statistics-mres.aspx)

[Postgraduate degree courses, School of Mathematics Graduate school \(/schools/mathematics/postgraduate/index.aspx\)](/schools/mathematics/postgraduate/index.aspx)

Contact

Mrs Janette Lowe

Tel: +44 (0)121 414 6193

Email: pgoffice@maths.bham.ac.uk (<mailto:pgoffice@maths.bham.ac.uk>)

[School of Mathematics \(/schools/mathematics/index.aspx\)](/schools/mathematics/index.aspx)

[Follow us on Twitter \(http://twitter.com/eps_unibham\)](http://twitter.com/eps_unibham)

Details

This programme involves both taught classes in Pure Mathematics and a substantial MRes thesis which accounts for almost two-thirds of the total degree. The minimum period of registration is 12 months.

The MRes is an ideal preparation for entry into the PhD programme at Birmingham or at any other UK university. Indeed, the MRes programme can be used as the first phase of our fast track PhD programme. This is an excellent option for well-qualified mathematics students who do not have all the necessary mathematical background to start immediately on a PhD in their area of choice. In the fast track programme the MRes thesis is extended over a further period of two years into a PhD thesis.

Each MRes student is assigned a project supervisor who will act as director and mentor in the preparation of the MRes thesis. This gives each student the opportunity to work one-to-one with mathematicians who are international experts in their fields.

In addition to the assessed elements of the course, students are expected to play a full part in the research life of the School. The School has an active seminar programme, and organises international conferences in all areas of mathematics.

Related links

- **[Postgraduate degree courses, School of Mathematics \(/schools/mathematics/postgraduate/index.aspx\)](/schools/mathematics/postgraduate/index.aspx)**

Why study this course

The University of Birmingham is one of the prestigious Russell group research-intensive Universities in the UK. The School of Mathematics attracts gifted graduate students from across the world.

The School of Mathematics at the University of Birmingham is a large and thriving department with approximately 50 faculty, over 650 students attending mathematics courses and approximately 60 full-time postgraduate students (UK, EU and International). A friendly, supportive and knowledgeable research environment is available. We offer comprehensive training in research and related skills.

Modules

These courses are approximately one-third course work and two-thirds dissertation. The dissertation is completed under the direction of a project supervisor which gives our students the opportunity to work one-to-one with a leading expert in their field.

Fees and funding

Tuition Fees

Tuition fees for 2015/2016 are as follows:

- £4,090 for **home/EU students**
- £13,195 for **international students**

Learn more about [fees and funding \(/postgraduate/pgt-fees/fees.aspx\)](/postgraduate/pgt-fees/fees.aspx)

Scholarships and studentships

Very well qualified MRes students will be considered for School Scholarships for their PhD studies. Contact: Mrs Janette Lowe on +44 (0)121 414 6193 or email pgoffice@maths.bham.ac.uk (mailto:pgoffice@maths.bham.ac.uk). Alternatively email sfo@contacts.bham.ac.uk (mailto:sfo@contacts.bham.ac.uk)

International students can often gain funding through overseas research scholarships, Commonwealth scholarships or their home government.

Entry requirements

A high standard in a mathematically-based undergraduate degree, equivalent to a UK upper-second or first class degree

Learn more about [entry requirements \(/postgraduate/requirements-pgt/index.aspx\)](/postgraduate/requirements-pgt/index.aspx)

International students

We accept a range of qualifications from different countries – learn more about [international entry requirements \(/postgraduate/requirements-pgt/international/index.aspx\)](/postgraduate/requirements-pgt/international/index.aspx)

[Standard English language requirements \(/postgraduate/requirements-pgt/international/index.aspx\)](/postgraduate/requirements-pgt/international/index.aspx) apply.

How to apply

Learn more about [applying \(/postgraduate/courses/apply-pg/index.aspx\)](/postgraduate/courses/apply-pg/index.aspx)

[Apply now \(https://pga.bham.ac.uk/lpages/EPSo09.htm\)](https://pga.bham.ac.uk/lpages/EPSo09.htm)

When clicking on the Apply Now button you will be directed to an application specifically designed for the programme you wish to apply for where you will create an account with the University application system and submit your application and supporting documents online. Further information regarding how to apply online can be found on the [How to apply pages](#) (<http://www.birmingham.ac.uk/students/courses/postgraduate/apply-pg/index.aspx>)

[Apply now \(https://pga.bham.ac.uk/lpages/EPSo09.htm\)](https://pga.bham.ac.uk/lpages/EPSo09.htm)

Related links

[Postgraduate degree courses, School of Mathematics Graduate school \(/schools/mathematics/postgraduate/index.aspx\)](/schools/mathematics/postgraduate/index.aspx)

[MRes Programme, Graduate School of Mathematics \(/schools/mathematics/postgraduate/mres-programme.aspx\)](/schools/mathematics/postgraduate/mres-programme.aspx)

Learning and teaching

These courses are approximately one-third course work and two-thirds dissertation. The dissertation is completed under the direction of a project supervisor which gives our students the opportunity to work one-to-one with a leading expert in their field.

A regular programme of seminars and conferences takes place within the School in a wide range of subjects. Currently thriving at Birmingham are the following research groups:

- Applied Mathematics: applied analysis, mathematical biology, fluid mechanics, hydrogen energy, fuel cells and their applications, numerical analysis and scientific computation
- Pure Mathematics: algebra, analysis, combinatorics and logic
- Theoretical and Computational Optimization: mathematical theory and methods applicable to managerial decision-making
- Statistics: time series analysis, multivariate statistics, kernel and wavelet based nonparametric smoothing methods, econometrics and medical statistics

Related research

- [School of Maths research \(/research/activity/mathematics/index.aspx\)](/research/activity/mathematics/index.aspx)

Employability

This programme gives comprehensive training in mathematics and areas appropriate to professional development and research foundations. The MRes is an ideal preparation for entry into the PhD programme at Birmingham. In fact, the MRes programme can be used as the first phase of our 'Fast-track' PhD programme.

University Careers Network

Preparation for your career should be one of the first things you think about as you start university. Whether you have a clear idea of where your future aspirations lie or want to consider the broad range of opportunities available once you have a Birmingham degree, our Careers Network can help you achieve your goal.

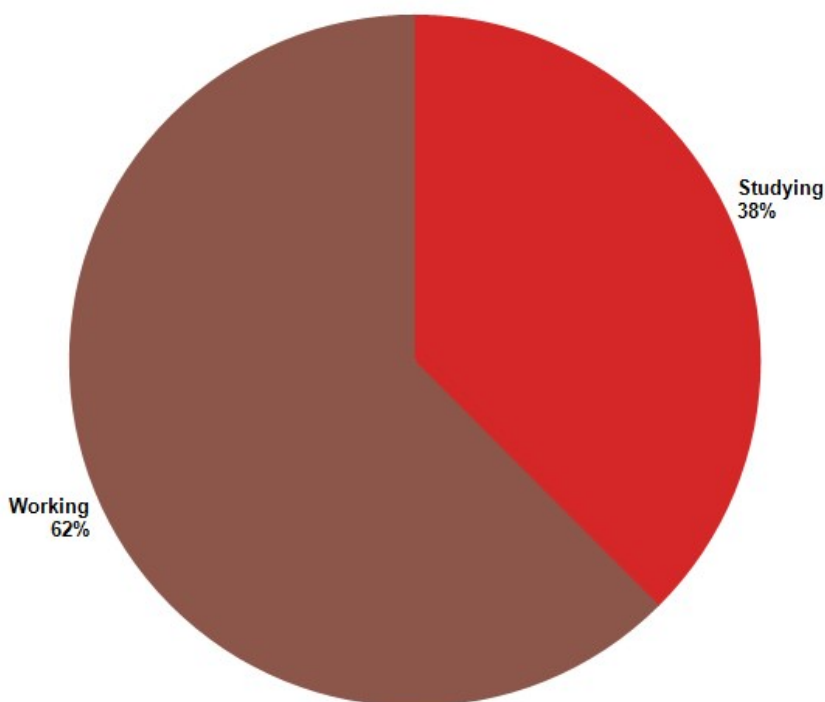
Our unique careers guidance service is tailored to your academic subject area, offering a specialised team (in each of the five academic colleges) who can give you expert advice. Our team source exclusive work experience opportunities to help you stand out amongst the competition, with mentoring, global internships and

placements available to you. Once you have a career in your sights, one-to-one support with CVs and job applications will help give you the edge.

If you make the most of the **wide range of services** (<https://intranet.birmingham.ac.uk/as/employability/careers/college/eps/index.aspx>) you will be able to develop your career from the moment you arrive.

Destinations of Leavers from Higher Education (DLHE) 2011/12

The DLHE survey is conducted 6 months after graduation.



Examples of employers

- Aon Hewitt
- Barnett Waddingham
- Capita
- Deloitte
- Deutsche Bank
- Ernst & Young
- Mercer
- PricewaterhouseCoopers
- Softcat
- Tudor Grange Academy School

Examples of occupations

- Actuarial Trainee
- Actuarial Consultant
- Actuary
- Analyst
- Associate Auditor
- Consultant
- Financial Analyst
- Management Accountant
- Secondary School Teacher
- Software Tester

Further study-examples of courses

- ACA - Accountancy

- ACCA - Accountancy
- MSc Accounting and Finance
- MSc Actuarial Science
- MSc Computing Systems
- MSc Finance and Investment
- MSc Operational Research
- MSc Statistics
- PGCE Mathematics
- PhD Applied Mathematics

Visit the **Careers section of the University website** (<https://intranet.birmingham.ac.uk/as/employability/careers/index.aspx>) for further information.

