



UNIVERSITY OF
BIRMINGHAM

Professor of Statistics - School of Mathematics



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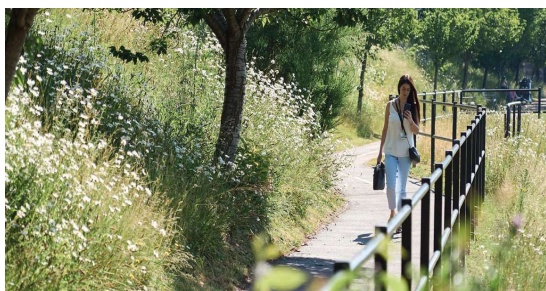
1. About the University of Birmingham

From the outset in 1900, the University of Birmingham was founded on principles of being a civic institution where students from all religions and backgrounds were accepted on an equal basis. The University prides itself on being an institution that provides opportunities to convene and influence the future shape of the region. We work to address challenges, including meeting a growing skills and education gap, driving innovation and progress, enriching cultural life, and supporting economic growth in the region, including as an employer and consumer.

Our heritage as the original 'redbrick' is combined with an ambitious agenda to continue the transformation of the University. In recent years, we have significantly increased our recruitment of leading academics, and have undertaken a £1 billion renewal of the campus estate.

Ranked within the top 100 universities globally, Birmingham is a member of the Russell Group and a founding member of the Universitas 21 global network of research universities. Numerous staff have received the most prestigious recognition within their fields, including Nobel Prizes. The quality of our research has grown significantly, as demonstrated in the 2021 Research Excellence Framework results, where we ranked 10th, having enjoyed the biggest rise of any institution in the Russell Group. This success is continuing, with academics at Birmingham attracting in excess of £250m in research awards in the last academic year. The University recently delivered an important strategic initiative to support a talented academic workforce with the introduction of a new Academic Career Framework ([Birmingham Academic Career Framework - University of Birmingham](#)). It is consistently amongst the most targeted universities by graduate employers.

We have our own non-selective secondary school and sixth form serving the diverse communities of Birmingham, and have a major campus in Dubai. We take our role seriously as an anchor institution for the UK's diverse, youthful, and dynamic second city, and are one of the largest employers in the region. We played a central role in the success of the Birmingham 2022 Commonwealth Games, and value our partnerships with local organisations including through our Civic University Agreement signed with Birmingham City Council and the West Midlands Combined Authority. Through The Exchange we have a city centre base from which to work with partners. We are currently working with Bruntwood SciTech and NHS partners to develop the Birmingham Health Innovation Campus which will open in 2024.



2. Birmingham 2030 Strategic Framework

Through our Birmingham 2030 Strategic Framework we have set an aspiration to become a top 50 global institution. We recognise this is a genuinely challenging aim, which will require a vibrant, intellectually exciting, and diverse University community for research and education, as well as working closely with our partners in Birmingham and around the world.

With world-class research and outstanding global education as our core mission, we will strive to increase the volume and quality of our research to make an even greater difference to the world around us. We will be the UK's exemplary civic University, remaining firmly committed to our foundations in the highly diverse communities, people, and economy of the city of Birmingham and the West Midlands. A link to the Birmingham 2030 Strategic Framework can be found here: bham.ac.uk/2030



3. Our University Community

At Birmingham, we teach and research across the full breadth of academic disciplines, creating a vibrant community with multidisciplinary opportunities for research and education. We are a truly international community, comprising more than 8,000 staff, 38,000 students, and over 350,000 alumni. Our student community is not only one of the largest of any UK university, but also highly diverse, with 86% of our home undergraduate students from state schools, 43% from black, Asian or other minority ethnic backgrounds, and 36% in the first generation of their family to attend university. We have a diverse staff community: over one-third of our academic staff are from overseas, around 22% of our staff are from black, Asian or other minority ethnic backgrounds, and 5% have a declared disability.

Our most recent staff survey indicates levels of engagement and pride which most employers would be pleased to achieve, and we are committed to building on this through the inclusion of 'people and culture' as a core pillar of the Birmingham 2030 Strategic Framework. We support academics at all stages of their career through our recently reformed Birmingham Academic Career Framework, with the aim of supporting colleagues to develop and maintain an academic culture of intellectual stimulation and high achievement, whilst fostering a deep affinity with the institution.

We value our diversity and aim to provide a welcoming and inclusive environment for all members of the University community. We believe our diversity is a source of strength that underpins the exchange of ideas, innovation and debate at the heart of our academic mission. The University holds Advance HE Race Equality Charter Silver Award at institutional level, with many school-level awards at both silver and bronze.

Birmingham 2030 strengthens our commitment to sustainability as one of the core pillars of our activity. This includes using our research and education to make a major global contribution to the UN Sustainable Development Goals, a headline aim to be net zero carbon for scope 1 and 2 by 2035 and overall by 2045. We are active partners in Birmingham's Tyseley Energy Park developing new technologies to contribute to Birmingham's net zero ambitions.

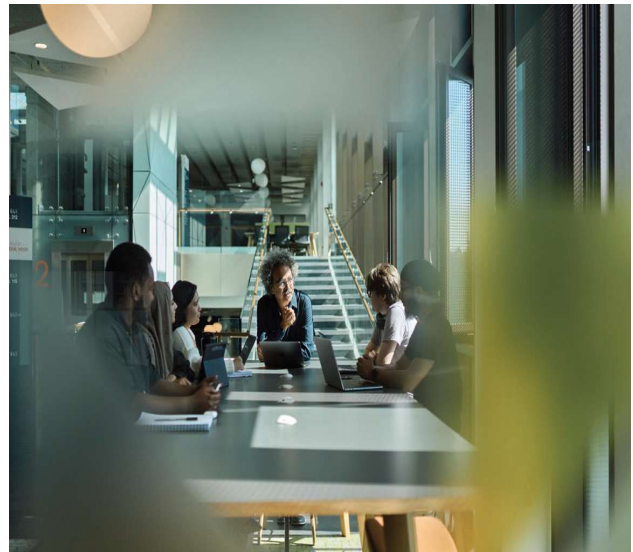


4. Leadership and Governance

The University has a strong working relationship between the Council and the executive, and our recent Council effectiveness review commended the 'strong sense of there being "one team" across non-executives, executives and staff and student members'. The governing body of the University is the Council, which is chaired by the Pro-Chancellor, Mervyn Walker. Council comprises 24 lay, academic and student members, most of whom are lay members external to the University.

There are five committees, which report to Council: University Executive Board, Strategy, Planning and Resources Committee, Audit Committee, Membership Committee, and Remuneration Committee.

The University Executive Board (UEB) is the senior leadership team of the University and a Committee of Council. It is chaired by the Vice-Chancellor and its membership can be viewed here. [Leadership - University of Birmingham](#).



5. The College of Engineering & Physical Sciences

The College of Engineering and Physical Sciences is one of the largest groupings in Europe, bringing together physical sciences and engineering into one coherent college. It is tackling some of the biggest challenges facing humankind from climate change and sustainability to staying healthy and tackling disease. We have research institutes and centres spanning diverse areas including energy innovation, quantum technology, railways, healthcare technology, robotics and cyber security. Our research spans the full spectrum from discovery to translational research.

Our vibrant community of over 1,100 academic and professional services staff work collaboratively across a range of disciplines and interdisciplinary fields. We have a rapidly expanding research grant portfolio and steady growth in research awards. Our professional services staff provide valuable expertise, working in partnership with academic colleagues to support research activity and help the College to develop its influence regionally, nationally and globally.

The College is home to over 10,000 students in Birmingham and our Dubai campus and at our Joint Institute in China. They study a diverse range of undergraduate, postgraduate taught and research programmes. Our education portfolio is also growing with the introduction of online learning and continuing professional development courses. Academic and professional services colleagues work in partnership to attract high quality students from around the globe and ensure a high-quality experience for our students and their wellbeing, whatever location or method of study they choose.

The School of Mathematics is one of seven Schools within the College, along with the Schools of Chemical Engineering, Chemistry, Computer Science, Engineering, Metallurgy & Materials and Physics & Astronomy, which affords students, staff and alumni access to learning and career development opportunities which few educational institutions can match. All subjects in the College of Engineering and Physical Sciences improved their quartile ranking in the Research Excellence Framework 2021.

Beyond the School structure, the College has a huge breadth of research activity and outputs. Our computer scientists are driving forward the University's new Institute for Interdisciplinary Data Science and Artificial Intelligence, a nexus for collaborative research and education. At the Birmingham Energy Institute, we are focused on the global challenge of energy consumption and are creating technology and guiding policy to shape energy solutions.

We lead the UK Quantum Technology Hub for Sensors and Timing which brings together physics and engineering academics. The Hub is playing a major role in influencing government policy, securing public funding to help translate laboratory science into real-world solutions. The work includes ultra-precise sensors that improve health and safety during excavation, optical clocks to improve navigation and communications, and using revolutionary technology for health applications including research into dementia.

Equality, Diversity, and Inclusion

Equality, diversity, and inclusion (EDI) is at the heart of the College's strategic vision and is something that the College Board takes very seriously. The College's EDI team drives and embeds behavioural and cultural change; by promoting EDI events, developing, and signposting EDI-related policies and services, exploring barriers to success and providing scrutiny and advocacy for strategic decisions.

Our Railway Engineering group, which was awarded the Queen's Anniversary Prize in 2017, has extensive collaborations with industry, including securing £92m investment through the Research Partnership Investment Fund.

Our world-leading High Temperature Research Centre is built on a £60m investment from Rolls-Royce and this collaboration won the 2023 Queen's Anniversary prize. We run one of the four national quantum technology hubs, an £80m initiative that focuses on technology transfer from fundamental science to application. We support academics to engage with policy makers, and through the work of University of Birmingham Enterprise, manage the University's extensive technology transfer and academic consultancy business, IP protection and spinout portfolio.

More information about the College, can be found here: [About the College of Engineering and Physical Sciences - University of Birmingham](#)



6. The School of Mathematics

The School of Mathematics at the University of Birmingham is one of the largest communities of mathematical scientists in the UK. With over a century of research and teaching, it has a proud legacy, global reach and an ambitious outlook. As a vibrant international centre for excellent research, the School delivers impactful work that benefits scientific advancement and technological innovation for individuals and societies. Its outstanding educational offering inspires students and drives academic excellence across three campuses in Edgbaston, China and Dubai.

The School has around 80 Academic staff, alongside research fellows and professional services support with a student population of approximately 1900 in Edgbaston and 1200 in Guangzhou. The School is making a leading contribution to the University's 2030 strategy, with a strong international reputation, buoyant research grant capture and growing domestic and international student population.

Research in the School is driven by the curiosity of our researchers, collaborations across the College and University, and by the needs of industry, healthcare and external policy makers. Theoretical advances are making fundamental contributions in areas such as graph theory, harmonic analysis, and mathematical physics, whilst applications are tackling human trafficking, improving IVF outcomes, helping to diagnose and treat epilepsy, reducing ocean noise pollution and improving aviation fuel efficiency.

The Statistics and Data Science group at the University of Birmingham has over ten academic members of staff and has real strength in computational statistics. Our methodological expertise spans Bayesian inference, epidemic modelling, data-driven optimisation, inverse problems and transfer learning, with applications ranging from neglected tropical diseases to modern slavery to image analysis. The group has strong links across the University, including connections to the Institute for Microbiology and Infection, the Centre for Optimisation, Simulation and Modelling, the Institute for Data and AI, and one of the largest medical schools in the UK.

You can explore Research Institutes and Centres across the University of Birmingham here: <https://www.birmingham.ac.uk/research/centres-institutes>.

The breadth and depth of modern mathematical sciences is captured in the School's curriculum as it inspires students and delivers transformative education in Birmingham and on the overseas campuses in Dubai and China. Undergraduate and postgraduate programmes reflect research interests and the growing interdisciplinary nature of the subject, and provide a platform for students to pursue a broad range of careers or further study. The School's flagship Jinan-Birmingham Joint Institute (JBJI) in Guangzhou offers a British style education and is now ranked in the top 10 China-Foreign Joint Institutes by the Ministry of Education. Since its launch in 2016, the JBJI has graduated hundreds of Chinese students on its four Applied Mathematics programmes. The School's educational offering also extends to the University's Dubai campus where it teaches a postgraduate programme focusing on financial mathematics and data science.

7. Role Summary

We are seeking an outstanding candidate who will provide significant strategic leadership which will positively enhance the profile of the institution.

The post holder will have an excellent international reputation and research profile, including a track record of innovative research with influence in the discipline, along side an extensive record of delivery the teaching and learning agenda. As senior academics, our Professors also make significant contributions to leadership and management activity and act as a role model in respect of citizenship.

Research

Overarchingly, you will provide intellectual and strategic leadership for the Statistics and Data Science group, build critical mass and research income, strengthen the group's national and international profile, and develop interdisciplinary opportunities across the University. Key duties include:

- Develop, plan and lead research activities/programmes of superb quality in the disciplinary area, including publishing high quality innovative, distinctive and significant outputs which are world-leading in terms of originality, significance and rigour.
- Regularly contribute to other research-related activities such as conference papers and keynote speaker invitations at conferences.
- Provide leadership on the generation of research income, supporting colleagues to maximise funding opportunities, promoting collaboration with external researchers and organisations. Lead the development of strategies, policies and procedures which have a positive and quantifiable impact on equality, diversity and inclusion.
- Maintain a sustained track record of income generation appropriate to the discipline to support own work.

- As appropriate for the discipline, lead a major research group, managing people and resources to deliver an ambitious research vision

Education

- Leading the development of high quality, inclusive and academically challenging practice in research-intensive teaching, learning and assessment. This will include leadership of curriculum design to ensure the curriculum offer is contemporary, inclusive, engaging, international and academically challenging.
- Ensuring that the teaching in the School embeds and embraces the input of external stakeholders.
- Designing and leading policies and practices to ensure the active engagement of students in curriculum design and the running of the School and promoting best practice across the University and beyond.
- Leading innovative approaches to digital resources/environments and supporting colleagues to use them in the delivery of teaching, learning and assessment.
- Providing leadership on effective feedback on assessments and/or contribution to the design of assessment policies and strategies within and beyond the institution
- Leading the development and implementation of a wider vision and culture that promotes equality and values diversity and inclusion in all education related activity, and which has a quantifiable impact.

Role Summary Continued:

Leadership, Management and Citizenship

- Lead and manage major activities in the School/College/University. This may be in relation to one or more of the following:
- external partnership activities/collaborations,
- leading a Department or undertaking School/College roles, including developing institutional policies and practice;
- leading activities contributing to a positive and inclusive community spirit across the School/College/University by using position and influence to ensure that others engage positively with the University's Strategy;
- leading, developing and motivating colleagues using mentoring and coaching skills;
- proactively supporting Equality, Diversity and Inclusion activities.

Person Specification

The post holder will have an outstanding and sustained profile of achievement evidenced by the following:

- PhD or equivalent qualification or an equivalent body of work;
- A solid track record of delivery of a range of teaching and learning interventions;
- An excellent and widely recognised reputation amongst peers nationally;
- Proven ability to plan and lead the delivery of curriculum development, assessment strategies;
- Track record in translating education-related output into impact on other academic staff and on the wider community through engagement with policy and practice, consultancy and advisory work.
- A substantial record of international quality outputs with an excellent and widely recognised reputation amongst peers internationally;
- A track record in influencing other scholars and the wider community through publication, engagement with policy and practice, consultancy and advisory work;
- Proven ability to plan and lead the delivery of research with a sustained track record of attracting significant funding as appropriate to the discipline;
- A track record in translating research into impact on other scholars and on the wider community through publication, engagement with policy and practice, consultancy and advisory work.

8. How to Apply

Post: Full Time

Duration: Permanent

Grade: Professor

(Research and Education Pathway)

Application process

Download a full job description and submit an electronic application here:

https://edzz.fa.em3.oraclecloud.com/hcmUI/CandidateExperience/en/sites/CX_6001/job/9886/?utm_medium=jobshare&utm_source=External+Job+Share

Recruitment Timeline

- Closing date for applications: 20th September 2026
- The Selection Process may include meetings/ presentations within the School and a Panel Interview in the Autumn.

Queries

For confidential enquiries, please contact,

Professor Paul Houston, Head of School of Mathematics p.houston@bham.ac.uk.

As a part of our senior recruitment process your application may be shared in confidence with two external assessors (these will typically be professors within a related academic field, but external to the University of Birmingham).

Therefore, your application may need to be sent outside the EEA. Their views may be sought on your suitability for shortlist and they may also be invited to be involved in the interview process. If you have any queries on concerns, please contact Emma Stanway (College HR Business Partner) on e.stanway@bham.ac.uk to discuss further.

Benefits: details about all of our benefits can be found here: [My Benefits](#)



