



UNIVERSITY OF
BIRMINGHAM

School of Computer Science Professorial Chair and Deputy Head of School (Education)

125
years

We advance
We activate

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1. Executive Summary

The School of Computer Science is looking for an outstanding candidate to provide leadership and innovation for all facets of education and teaching in computer science and artificial intelligence.

The post holder is expected to have an excellent international reputation, based on an extensive track record of academic excellence and education leadership in computer science or closely related area. Their leadership aims to deliver innovative teaching methodology and programmes in computer science and artificial intelligence, including possible executive training and/or online delivery, and deliver an exceptional student experience.

The post holder will be the lead in education for the School of Computer Science, member of the School Management team, Chair of the Education Board and line manager in support of the careers of the School's education staff in their role they will interact on a continuous basis with education leadership and professional services in the University and represent the University and computer science externally.

The post is an open-ended Chair (Full Professor) post and can be either on the Education, or the Research & Education pathway.



2. About the University of Birmingham

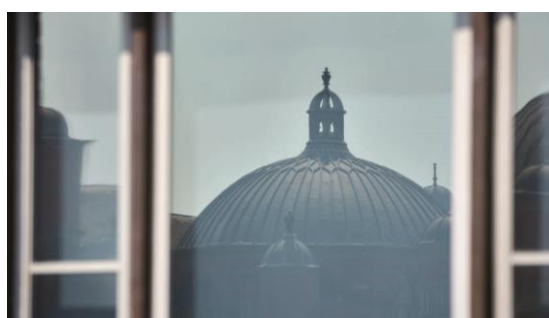
The University of Birmingham was founded on the vision of Joseph Chamberlain in 1900 to provide a university for the people of Birmingham, 'a great school of universal instruction... taking all knowledge in its province'. This philosophy has defined and shaped us as an institution for our city ever since, founded on equality of opportunity for all.

We are proud to continue to find new expressions for these civic roots. The University is now a global institution, with our doors open, welcoming the best to Birmingham and taking the best of Birmingham to the world.

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.



3. 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



4. 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. We hold a Bronze Race Equality Charter Award and a Bronze Athena SWAN Charter Award at institutional level, with many school-level awards at both silver and bronze. The HR Service is closely involved in supporting the range of [University ED&I activities](#).

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.



5. Research and Innovation

The University is one of the UK's most successful institutions in terms of research. In the latest Research Excellence Framework, we were placed 10th in terms of GPA, with the highest rise in position of any Russell Group university, and with significant improvements across the breadth of our disciplines – a genuine University-wide achievement. Our areas of research excellence are unusually comprehensive for a UK university, with a submission to 28 of a possible 34 Units of Assessment in the REF2021. The total value of research funding won by the University has grown rapidly in recent years, and we now have a portfolio of over 2,800 live projects with an award value to the University of over £900m.

Our academic community achieves remarkable things. We have been integral to some of the greatest scientific discoveries of recent times, such as the discovery of the Higgs boson particle and the detection of gravitational waves. We enjoy world-class expertise in areas as diverse as mental health, Shakespeare studies, global maternal health, formulation engineering, quantum technology, psychology, water science, air pollution, corpus linguistics, inter-faith understanding, and character education.

Our robust industrial partnerships support enterprise and innovation across several sectors, working with companies as diverse as Siemens, AstraZeneca, and the Royal Shakespeare Company, and drawing on our innovation assets such as the Birmingham Health Innovation Campus and the Manufacturing Technology Centre in Ansty, near Coventry.



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.



6. Leadership and Governance

The University has a strong working 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.

[Leadership - University of Birmingham.](#)



The University is organised into five academic colleges, each of which consists of several schools and departments. Each College is led by a Pro-Vice-Chancellor and Head of College who is a member of the University Executive Board. The five colleges are: Arts and Law, Engineering and Physical Sciences, Life and Environmental Sciences, Medical and Dental Sciences, and Social Sciences.



To bring together the senior academic and Professional Services leadership across the University, there is a University Leadership Group (ULG) led by the Vice-Chancellor, which meets weekly and has regular strategy away days. The Director of People and Culture is a member of ULG.



7. Professional Services

The University of Birmingham has fully unified Professional Services, led by the Registrar and Secretary, who is supported by the Registrar's Leadership Group (RLG), made up of the Directors of Professional Services (Senior Officers) and the College Directors of Operations. The Registrar and Secretary is the University's Chief Operating Officer, reporting to the Vice-Chancellor and Principal. [Professional Services](#)

We aim for high quality Professional Services in support of the University's academic mission. Across all of our Professional Services, we recognise that it is our people who are the heart of what we do, and so we are focused on creating a culture for them to thrive.

We have a sector-leading staff development programme:

[The Birmingham Professional Programme](#), supported by a long-standing Graduate Management Trainee programme. Many of our senior leaders are also closely involved with professional sector networks and representative bodies.

We look to the national and international higher education sector, and beyond, to identify best practice. We compare our efficiency and effectiveness in Professional Services with other Russell Group and similar international universities in Australian, New Zealand and North America as part of the Uniforum benchmarking consortium.



These insights allow us to understand and adopt global best practice. For example, we have recently adopted a University-wide approach to the functional co-ordination of services connecting local with central support, with each Senior Officer acting as Functional Co-Ordinator for the area. We undertake an ongoing programme of service development in light of sector trends and in response to user feedback.

As a result, we have made significant improvements in recent years resulting in measurable improvements in user satisfaction and efficiency in several areas including HR operations, research support, finance, and IT services. This work is linked to an IT business system transformation programme, which included introducing Oracle Fusion as the 'Core System' for Finance, HR and Payroll.



8. The Role - Chair and Deputy Head of School (Education)

Summary

We are seeking an outstanding candidate who will provide significant strategic leadership that will positively enhance the institution's profile.

The post holder will be expected to have an excellent international reputation based on an extensive track record of innovative research, which has a significant quantifiable influence in the subject area. The post holder will also significantly contribute to teaching and learning, contribute at a high level to leadership and management activity, and act as a role model for citizenship.

Research

- Develop, plan and lead research activities / programmes of outstanding quality in the disciplinary area;
- Publish high quality innovative, distinctive and significant outputs which are considered to be 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, and 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;
- May lead consultancy projects and/or advise external organisations based on research and reputation in the subject area;
- Participate actively in the development of the research strategy in the Department/School/College as appropriate;
- Provide outstanding supervision to research students.

Education

- Develop, plan and lead high-quality education activities;
- Develop high-quality, inclusive and academically challenging practice in research-intensive teaching, learning and assessment;
- Deliver a high-quality portfolio of innovative, engaging and inspirational teaching which is accessible to all;
- Contribute to curriculum design to ensure the offer is contemporary, inclusive, engaging, international and academically challenging;
- Lead innovative approaches to digital resources/environments and support colleagues to use them in the delivery of teaching, learning and assessment;
- Provide outstanding project/dissertation supervision;
- Develop and lead collaborative working arrangements with colleagues across the Department, School and more comprehensive University to deliver outstanding teaching.

Leadership, Management and

Citizenship

- Lead and manage significant activities in the School/College/University. This may be about one or more of the following:
 - external partnership activities/collaborations;
 - leading a Department or undertaking School/College roles;
 - developing institutional policies and practices;
 - leading activities contributing to a positive and inclusive community spirit across the School/College/University;
 - 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:

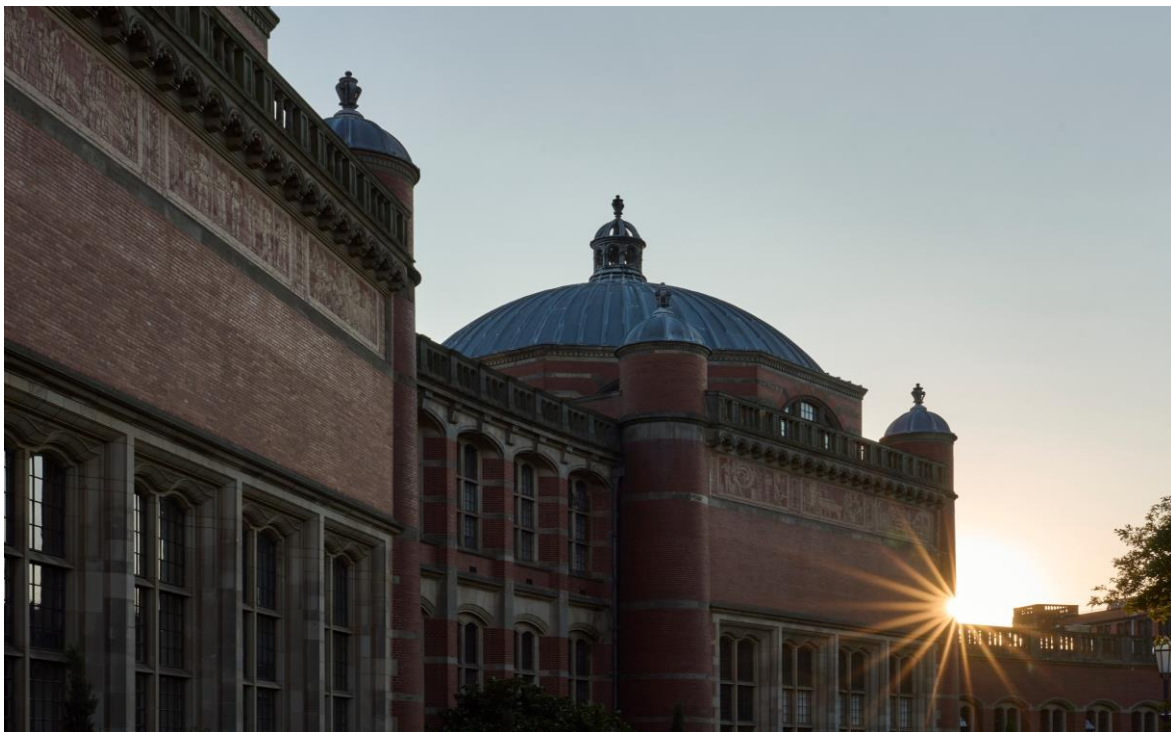
- PhD or equivalent qualification or an equivalent body of work;
- A substantial record of international quality outputs;
- An excellent and widely recognised reputation amongst peers internationally;
- Proven ability to plan and lead the delivery of research;
- A sustained record of attracting significant funding as appropriate to the discipline;
- A track record in translating research into impact on other scholars and the broader community through publication, engagement with policy and practice, consultancy and advisory work;
- A track record of attracting and successfully supervising high-quality doctoral students;
- A proven ability to develop and lead the delivery of innovative research-led teaching, learning and assessment;
- A proven ability to lead curriculum design and implementation;
- Willingness to engage in teaching-related CPD
- Evidence of innovative approaches to digital resources/environments;
- Evidence of high-level leadership and management contributions;
- Evidence of high-level successful collaborations (whether research, teaching or other);
- Evidence of proactively engaging in citizenship activities;
- Evidence of working with others for the greater good of the academic discipline and institution.



9. University Benefits

Our staff can expect a variety of great benefits when they work here, which include:

- Family friendly policy, practice, schemes and support
- Progressive pay structure
- Generous annual leave
- Generous, tax efficient workplace pension schemes
- Travel Support
- Professional Development
- Health and Wellbeing Support and schemes
- Discounts and special offers
- Trade Union Facility Time
- And much more. Find out more about our extensive range of Pay and Benefits here [Staff benefits - University of Birmingham](#).



10. The School

The **School of Computer Science** is one of seven schools which form the [College of Engineering and Physical Sciences](#), one of the five Colleges of the University.

The School of Computer Science is a dynamic and globally minded school, focused on providing outstanding education alongside impactful, and interdisciplinary research within the University of Birmingham.

The school offers a vibrant, open, and intellectually stimulating work environment in its dedicated computer science building, home to state-of-the-art education and research laboratories for Security, Medical Imaging and Intelligent Robotics.

We are home to over 100 academic and postdoctoral faculty and 30 Professional Services Staff, offering programmes across the full range of undergraduate and postgraduate computer science disciplines, operating across our Dubai and Edgbaston Campuses.

We are one of the leading UK institutions for research and teaching in computer science, ranking high in a variety of research and education league tables, offering programmes across the full range of Computer Science disciplines, with further ambitions to become a global top 50 University as set out in our ambitious 'Birmingham 2030 Strategic Framework'.



Taught Programmes.

The school provides a wide range of high-quality taught programmes that help drive our high student numbers. We offer a number of Undergraduate courses, including Artificial Intelligence and Computer Science BSc with the option for a year in industry, as well as being one of only 5 UK Universities to offer a BSc Computer Science with Digital Technology Partnership degree apprenticeship with PwC (4 years). Our MSc programmes, including Artificial Intelligence and Machine Learning, Cyber Security and Data Science MSc are also extremely popular, being offered at both our Edgbaston and exciting new Dubai Campus.

Accreditation and Rankings

Our School is consistently recognised both nationally and globally for the quality of its teaching and research. We are one of the best Computer Science Schools in the UK for research, ranking 3rd across all UK universities, both in average score for publications and number of world-leading and internationally excellent publications, according to the recent UK-wide Research Excellence Framework 2021. Alongside our excellent REF results, we proudly boast employment prospects that also rank in the top 5 amongst UK Institutions for our students according to 2021 and 2022 cohort data and consistently rank highly in both national and global University rankings in the subject area of Computer Science.

Research Areas

From helping local communities to influencing global debate, The School of Computer Science contributes valuable insight into issues of global importance, helping our research to have a real impact in areas as diverse as medical imaging, human rights, and astrophysics. Our research is focused around six main areas which undertake their research with relevance, reliability, and rigour in a diverse range of subjects:

- **Science for AI and AI for Science:** Our AI theme at Birmingham conducts world-leading research in core areas of AI with specific strengths in machine learning, evolutionary computation, robotic and computational vision. We are looking for candidates who can deepen the theoretical foundations of AI, bridge between core areas of AI, or bridge between theory and practice - for instance theoretical machine learning, evolutionary computation & learning, and integrated robot systems. Candidates demonstrating achievements on performance guarantees for any aspect of AI (generalisation bounds, robustness, privacy, fairness, run time, etc) are encouraged to apply. We are also interested in principled AI approaches to data mining and data analytics.
- **Theory of Computation:** The Theory of Computation group at Birmingham is world renowned, with leading research in a variety of topics in theoretical computer science. These include programming languages, verification, category theory, type theory, graphical calculi, proof assistants, topology and domain theory, proof theory, quantum computation, philosophy of computation, and algorithms and complexity. We are looking for excellent candidates in one or more of these areas, or whose research activity complements our existing strengths.
- **Cyber Security and Privacy:** Recognised by EPSRC/NCSC as a UK Academic Centre of Excellence in Cyber Security Research, we are looking for outstanding candidates in cyber security and privacy, who can drive new dimensions to our research/teaching while supporting our ongoing work. Areas of interest include, but are not limited to applied cryptography, hardware-based security, embedded systems security (including automotive security), side-channel and fault-based attacks and security protocol analysis.
- **Perception, Language, Action:** The research theme "Perception, Language, Action" brings together researchers in the research specialisation areas of Computer Vision, Imaging, Natural Language Processing, Embedded Robotics, and Cognitive Science. The organisation of the researchers around the theme "Perception, Language, Action" creates a collaborative network that is of interest to all involved, exchanging the experiences and sharing the common tools (especially related to large generative models, data and techniques) and developing larger projects that require expertise that go beyond the narrow domains. The group has proved to be an important player in AI-driven multidisciplinary initiatives globally, as most of such projects require AI/ML techniques that involve perception, language and/or action.

- **Socio-Technical Systems:** Our human centred computing academics study aspects of relationships between people, society and computing. We investigate various aspects of intelligent interaction between people and machines: including human-in-the-loop decision making, habit formation, intelligent notification, multitasking and natural-language processing and dialogue. We examine the developing regulatory framework for software, with a particular focus on the lawful exploitation of emerging artificial intelligence and algorithmic decision making systems and we investigate the economics of software development which answer questions including how to automate software cost estimation.

Impact and Engagement

While pursuing excellence in both our research and education, we also aim to optimize our positive impact on society through interdisciplinary work within our own institution, and partnerships across government and industry with large multinationals such as Huawei, Samsung, Tesco, Fetch AI and others. The School is a University partner of The Alan Turing Institute, with 4 ATI Fellows in our academic staff. We are also proud to be home to EPSRC Senior Fellows, Royal Society Fellows, and members of the Academic Centre for Excellence in Cyber Security Research (ACE-CSR). Numerous members of the School's academic faculty have leading roles in various nationally recognised bodies within the institution such as:



Institute for Data Science and AI: The Institute for Data Science and AI is a nexus for collaborative research and education at the University of Birmingham, acting as a focal point for knowledge exchange, extending our reach and influence beyond the University to our partners in industry, the NHS and government.

Birmingham Centre For Cyber Security and Privacy: The Birmingham Centre for Cyber Security and Privacy produces impactful world-leading research in cyber security and privacy. Recognised by the UK National Cyber Security Centre (NCSC) in partnership with the Engineering and Physical Sciences Research Council (EPSRC) as an Academic Centre of Excellence in Cyber Security Research (ACE-CSR), the Centre prides itself in its collaborative and interdisciplinary approach, working alongside academia, industry and government to tackle cyber security challenges in our society.

Equality, Diversity, and Inclusion

Equality, Diversity, and Inclusion are strongly embedded in the School of Computer Science's vision to have a leading role in our institutional commitment to EDI. We host a range of diverse and inclusive talks and events and have recently completed our Athena SWAN report in which we were awarded Bronze accreditation.

The quality of our teaching and research within the school has enabled us to benefit heavily from University investment. We have recruited strongly in the past year and will continue to do so to help support our ambitions to become a top global institution for Computer Science.

We sincerely hope you will join us.

11. How to Apply

The University is committed to building a fully inclusive and diverse community, including in its senior leadership. We welcome and encourage applications from all candidates with the qualifications and experience to undertake this role, particularly women, and people from minority ethnic groups.

We are a family friendly employer, focused on supporting staff to develop and grow their career with us.

To apply, please submit your application through our jobs website by 15 June 2025 using this link: https://edzz.fa.em3.oraclecloud.com/hcmUI/CandidateExperience/en/sites/CX_6001/job/7128/?utm_medium=jobshare&utm_source=External+Job+Share
Reference Post number: 105823

Please include the following with your completed application form:

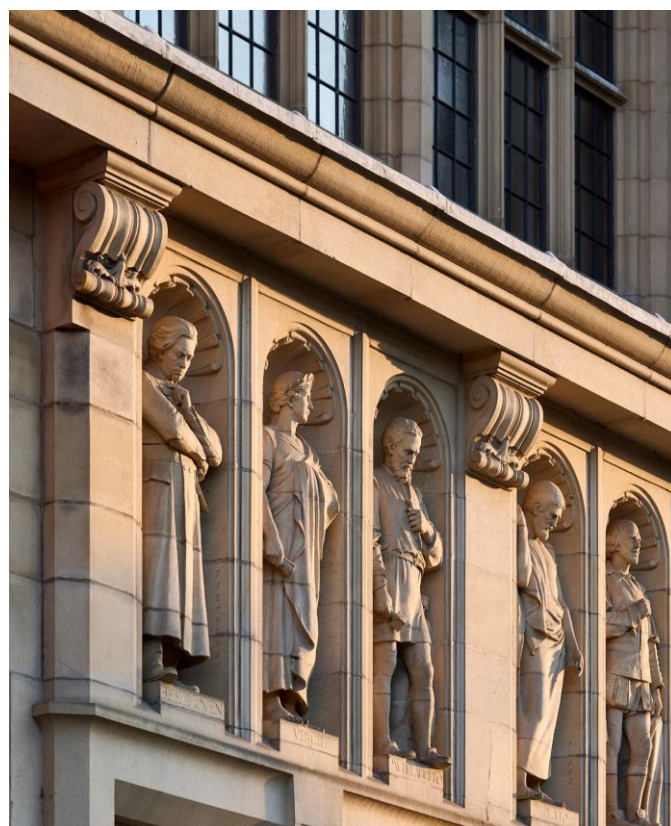
- An academic CV, along with a full publication list.
- A statement of future research plans and objectives in the context of the advertised role (max 2 pages).
- A statement on your teaching approach and experience (max 2 pages).

If you are shortlisted, you will have the opportunity to visit the University and the School as part of the selection process.

Please note, your application may be shared in confidence with two external assessors (typically professors within a related academic field, but external to the University of Birmingham). 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 about this, please contact Emma Stanway (College HR Business Partner) on E.Stanway@bham.ac.uk.

If you wish to be part of our team, please reach out for an informal, confidential discussion and we would be happy to talk with you. Please contact:

- Professor Aad van Moorsel, Head of School, a.vanmoorsel@bham.ac.uk



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