

CANDIDATE BRIEF

Lecturer or Associate Professor in Applied Statistics Faculty of Engineering & Physical Sciences



Salary: Grade 8 (£42,149 – £50,296 p.a.) or Grade 9 (£51,799 – £60,022 p.a.)

Reference: EPSMA1061

Closing date: Tuesday 31 May 2022

Full-time, Ongoing.

We will consider flexible working arrangements

Lecturer or Associate Professor in Applied Statistics, School of Mathematics, Faculty of Engineering & Physical Sciences

Are you an academic with a proven ability to carry out teaching and research in Statistics, Data Science or a related mathematical discipline? Do you want to combine an academic role with the opportunity to work closely with the UK Met Office to influence and deliver high impact research in the area of weather and climate science and services? Do you have an excellent research record and the ability to obtain research funding? Are you passionate about delivering an exceptional student experience in a research-intensive Russell Group University?

We are seeking a talented researcher in Statistics to join our School of Mathematics. This unique role is part of a strategic investment by the University in the areas of statistics and data science. Further, specifically this post builds on the existing <u>Met Office Academic</u> <u>Partnership</u> (MOAP) at Leeds, led from the School of Earth and Environment, to provide new links between the Met Office and the School of Mathematics. The Met Office aim is to provide climate science and services to people and organisations, so they can make better decisions to stay safe and thrive. The Met Office provides scientific advice and guidance to a wide range of Government sector clients including BEIS, DEFRA, FCDO and Ministry of Defence, as well as private customers such as those in the energy, transport, water and finance sector. This is an excellent opportunity to deliver high impact real world scientific research that will enhance the Met Office's capability, improve the quality of their products and predictions and improve advice to all Met Office customers.

You will be joining a group of at least nine staff at the University of Leeds who have positions that are in some way co-funded. Half your time will be funded by the Met Office for a period of two years, and we anticipate opportunities to continue such an arrangement longer term. You will have an excellent research record with the ability to collaborate effectively in a multidisciplinary setting, an aspiration to obtain external research funding and a passion for delivering first-class inspirational teaching and supervision within a research-intensive university.

As a Lecturer, you will carry out research, teaching and associated administration within the School, Faculty and University and contribute to academic leadership in the field of Statistics. For appointments at Associate Professor Level, you must also be able to demonstrate international standing in your field, a track record of successful and substantive grant applications, the capacity to deliver an outstanding student experience and an ability to undertake successful academic leadership. Many of our modules and



programmes are accredited by the Royal Statistics Society (<u>RSS Accreditation</u>) and the Institute and Faculty of Actuaries (<u>IFoA Exemptions</u>).

Collaboration with the <u>Met Office</u> will involve providing statistical guidance and academic rigour across the full range of applied science research with the Met Office. This will give the postholder an unprecedented opportunity to develop and demonstrate their own research ideas in close collaboration with Met Office experts. There will also be a requirement for occasion delivery of short training courses for applied scientists at the Met Office and participation in relevant Met Office special interest groups.

What does the role entail?

As a Lecturer, your main duties will include:

- Being actively involved in research, innovation and impact at a national and international level, as well as contributing to local School/Faculty activity;
- Maintaining a record of high-quality publications of national and international standing;
- Attracting research funding individually and collaboratively to underpin high quality research activity and research programmes/projects;
- Promoting the integration of your own research area with other research interests within and, as appropriate, outside the School and Faculty;
- Providing research supervision and helping to attract students to the University;
- Undertaking research-led teaching at different levels, including assessment and examinations and contributing towards module design, review and quality assurance mechanisms;
- Providing support, guidance and timely feedback to students, acting as a personal tutor, resolving issues and/or referring to specialist parties, where appropriate;
- Contributing effectively to the administrative processes and committee structures of the School/Faculty including taking on leadership roles and managing initiatives which facilitate School, Faculty or University performance or business.
- Undertaking the above duties in a manner consistent with the University's commitment to principles of <u>equality and inclusion</u>.

As an Associate Professor, your main duties will also include:



- Pursuing, leading and developing the strategic direction of research, innovation and impact at an appropriately benchmarked level;
- Being recognised as an authority in your field, developing and maintaining an external profile as appropriate to the discipline;
- Playing a significant role in the design, development, planning and review of modules and programmes within the subject area as required;
- Managing or leading major initiatives or areas of work (as either sustained or one-off projects) as well as taking on leadership roles which facilitate School, Faculty or University performance or business as required;
- Maintaining a high quality record of regular and original research publications that are of national and international standing.

Further, the main duties in collaboration with the Met Office will include:

- To work with Met Office staff to pragmatically solve Met Office customer problems – through the development of new applied statistical approaches or by implementing the latest statistical techniques;
- Collaboration with Met Office staff to publish peer-reviewed papers;
- To develop further collaborations between the Met Office and Leeds University (e.g. through MSc programmes, joint PhDs etc).
- To upskill Met Office applied scientists through the delivery of basic statistical training and in a mentoring capacity;

The postholder will be based at Leeds but there may be a requirement for the occasional visit to the Met Office

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As a Lecturer you will have:

• A PhD in Mathematics, Statistics or a relevant discipline;



- A track record of research outputs, within the area of Probability, Statistics or Data Science, in refereed publications of internationally excellent quality;
- The potential for obtaining resources to support research in the future;
- An ability to contribute to and develop interdisciplinary collaborative research projects in a broad range of areas;
- Experience of teaching in a University environment, with an enthusiastic approach to teaching Statistics or Data Science and the ability to interact with a diverse range of students in ways that will enhance the student experience;
- A high level of interpersonal and communication skills, and a strong ability to communicate effectively in writing and verbally with students, academic and external audiences;
- An ability to listen actively, discuss and understand the needs of others and propose innovative solutions to address those requirements;
- An ability to contribute to management and administrative processes and structures, including managing resources and/or staff.

Additionally, for appointment at Associate Professor Level (Grade 9) you will have:

- An international reputation, including a sustained track record of raising research funds from national and international funding agencies and of research outputs as a single or main author of refereed publications of internationally excellent quality;
- Significant experience of teaching effectively at all levels within higher education, including module and programme design, review and development;
- Outstanding communication, team working and networking including experience of collaboration on cross-disciplinary projects;
- A proven ability to provide academic leadership, including managing resources and/or staff;
- Evidence of the ability to build trust to ensure engagement and commitment, and to treat staff fairly, with respect and dignity.

At both grades, you may also have:

- Expertise in the field of applied sciences, such as weather and climate;
- A successful record of providing statistical consultancy;
- Experience of collaboration with the Met Office;



- Experience of planning and supervising MSc dissertations and of providing PhD supervision;
- A proven ability to build partnerships with industrial, professional and public sector organisations on interdisciplinary collaboration, knowledge exchange and funding, with an interest in applying this to applied science at the Met Office.

How to apply

You can apply for this role online; more guidance can be found on our <u>How to Apply</u> information page. Applications should be submitted by **23.59** (UK time) on the advertised <u>closing date.</u>

Contact information

To explore the post further, for example to learn more about potential Met Office projects, or for any queries you may have, please contact:

<u>Robert Aykroyd</u>, Head of Statistics, <u>Department of Statistics</u> Email: <u>R.G.Aykroyd@leeds.ac.uk</u>

Professor Kurt Langfeld, Head of School, <u>School of Mathematics</u> Email: <u>K.Langfeld@leeds.ac.uk</u>

Additional information

In joining the University of Leeds, you will become part of an internationally focussed University that provides all our students with an outstanding education and experience and at the same time undertakes cutting-edge research of high quality, impact and significance. Several other schools and research institutes, e.g. the School of Earth and Environment (SEE), the Leeds Institute of Data Analytics (LIDA), the Leeds Institute for Fluid Dynamics (LIFD) and the Priestley International Centre for Climate Change (PICC), provide significant opportunities for interdisciplinary collaboration and to develop research links with other external partners in business, government and the third sector through the University's Research and Innovation Centre (NEXUS). The University is also a partner of the <u>Alan Turing Institute</u> with several Turing Fellows within the School.



The Met Office is the UK's national meteorological service. It provides critical weather services and world-leading climate science to support decision making across government, the public and private sectors and the general public. Maximising benefit to society increasingly requires moving beyond atmospheric science to address weather impacts and decision making, and application of an increasingly wide range of tools from numerical weather prediction to artificial intelligence and machine learning. The Met Office's supercomputer capability currently remains one of the most powerful in the world dedicated to weather and climate and, by the end of its life, it is estimated that it will have enabled £2bn of socio-economic benefits across the UK alone. This post will provide an outstanding opportunity for collaboration and delivering impact from research.

Faculty and School Information

Further information is available on the research and teaching activities of the <u>Faculty</u> of <u>Engineering & Physical Sciences</u>, and the <u>School of Mathematics</u>.

A diverse workforce

As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Engineering and Physical Sciences we are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring, and particularly encourage applications from, but not limited to Black, Asian and ethnically diverse people; people who identify as LGBT+; and people with disabilities. Candidates will always be selected based on merit and ability.

The Faculty of Engineering and Physical Sciences are proud to have been awarded the Athena SWAN <u>Silver</u> Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our <u>equality and inclusion</u> <u>webpage</u> provides more information.

Working at Leeds

Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our <u>Working at Leeds</u> information page.

Candidates with disabilities



Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our <u>Accessibility</u> information page or by getting in touch with us at <u>disclosure@leeds.ac.uk</u>.

Criminal record information

Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our <u>Criminal Records</u> information page.

