

CANDIDATE BRIEF

Lecturer (Teaching and Research) or Associate Professor in Applied Mathematics, Faculty of Engineering and Physical Sciences



Salary: Grade 8 (£45,585 – £54,395 p.a.) or Grade 9 (£56,021 – £64,914 p.a.) Reference: EPSMA1111

Closing date: Monday 03 June 2024

We are open to discussing flexible working arrangements

Lecturer (Teaching and Research) or Associate Professor in Applied Mathematics, School of Mathematics.

Do you have a proven ability to carry out teaching and research in applied mathematics? Do you have an excellent research record? Are you passionate about delivering an exceptional student experience in a research-intensive Russell Group University?

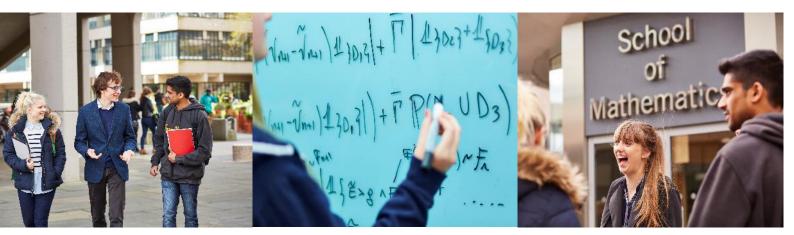
The School of Mathematics invites applications from academics who have an excellent research record, an aspiration to obtain research funding and a passion for delivering inspirational teaching and supervision.

You will carry out research, teaching, and management within the school, faculty and university and contribute to academic leadership. Current strengths in applied mathematics include integrable systems, nonlinear dynamics, fluid dynamics, virology and epidemiology, materials, inverse problems, mixing and flood mitigation. We are also open to new areas of research.

Computational modelling and data analysis are key in building the department's collaborations with academic and industrial partners in health, energy, and climate. Strategic importance lies in data science, AI and machine learning.

The School of Mathematics hosts the EPSRC Centre for Doctoral Training in Future Fluid Dynamics, which will support five cohorts of PhD students in interdisciplinary research from 2024 to 2028. If appointed 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 and the capacity to deliver an outstanding student experience.

The School of Mathematics offers family-friendly employment practices that are designed to enable a good work-life balance.



What does the role entail?

As a Grade 8 Lecturer (Teaching and Research), your main duties will include:

- Contributing to the delivery of an exceptional student education and overall experience within the School through:
 - Delivering high-quality research-led teaching, including assessment and examinations in a timely manner at different levels and through different modes of study (on-campus, on-line and/or off-site);
 - Supervision of undergraduate and taught postgraduate student projects;
 - Providing support, guidance and timely feedback to students, acting as a personal tutor, resolving issues or referring to specialist parties where appropriate;
 - The development and delivery of modules and degree programmes within the School, including the development of innovative educational approaches, and participating in review and quality assurance.
- Developing and delivering a planned programme of research and innovation in applied mathematics with impact at an international level. This will include:
 - Being actively involved in research, innovation and impact at a national and international level, as well as contributing to local activity;
 - Maintaining a record of high quality research outputs including publications and conference presentations;
 - Attracting funding individually and collaboratively to underpin your research plan;
 - Promoting the integration of your own research area with other research interests within and outside the School and Faculty;
 - Building academic networks to enable the integration of your own research area with other research interests within and, as appropriate, outside the School of Mathematics;
 - Providing research supervision and helping to attract funded postgraduate research students to the University.
- Contributing to the administrative processes and committees of the School and Faculty including taking on leadership roles and where appropriate, managing



initiatives, and undertaking your duties in a manner consistent with the University's commitment to principles of equality and inclusion.

As an Associate Professor (Grade 9), your main duties will also include:

- Promoting the discipline of applied mathematics nationally and internationally, winning prestige for both the discipline and the University;
- Pursuing, leading and developing the strategic direction of research, innovation and impact at an appropriately benchmarked level attracting research income and collaborating widely with leading academic and industrial organisations on an individual and collaborative basis to underpin high quality research activity and programmes/projects;
- 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) and taking on leadership roles in the School, Faculty or University.

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 Grade 8 Lecturer (Teaching and Research), you will have:

- A PhD in Mathematics or relevant discipline;
- A proven ability to deliver effective student education in Applied Mathematics in a University, with an enthusiastic approach to teaching mathematics and the ability to interact with a diverse range of students in ways that will enhance the student experience;
- A track record of research outputs, within the area of applied mathematics, in refereed publications of internationally excellent quality;
- Experience of proactively developing new teaching approaches and materials;
- A successful record of obtaining external research funding, commensurate with your career stage, with the potential for obtaining further funding in the future;



- A capability to engage with collaborative research projects, especially in computational modelling and data;
- An ability to contribute to management and administrative processes and structures, including managing resources and staff.

As a Grade 8 Lecturer (Teaching and Research), you may also have:

- Experience of providing postgraduate student supervision;
- Experience of contributing to academic leadership;
- Experience of undertaking outreach and publicity activities.

As a Grade 9 Associate Professor, you will also have:

- An international reputation, including a record of raising research funds from national and international funding agencies;
- A sustained track record 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.

As a Grade 9 Associate Professor, you may also have:

- Experience of PhD supervision, acting as primary supervisor to successful doctoral graduates;
- An ability to build partnerships with industrial, professional, and public sector organisations on interdisciplinary collaboration, knowledge exchange and funding.

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 or for any queries you may have, please contact:

Professor Grant Lythe, Head of Department

Email: G.D.Lythe@leeds.ac.uk

OR

Professor Kurt Langfeld, Head of School

Email: K.Langfeld@leeds.ac.uk

Additional information

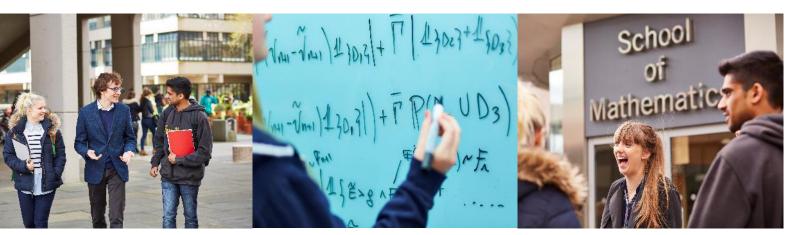
Faculty and School Information

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

We are a campus-based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our <u>Working at Leeds</u> information page.

Information for disabled candidates

Information for disabled candidates, 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>hr@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.

