



UNIVERSITY OF LEEDS

## CANDIDATE BRIEF

Lecturer in Computational and Numerical modelling, School of Mechanical Engineering, Faculty of Engineering and Physical Sciences



**Salary: Grade 8 (£51,753 – £59,966 p.a.)**

**Reporting to: Head of School**

**Reference: EPSME1210**

**Location: University of Leeds city campus (with scope for hybrid working)**

**We are open to discussing flexible working arrangements**

## Overview of the role

**Do you have a track record of high-quality research and a clear vision for developing your profile at an international level? Can you contribute to innovative research-led teaching and support an excellent student experience across undergraduate and postgraduate programmes? Are you committed to working collaboratively, contributing to an inclusive and supportive School community, and engaging in active academic citizenship?**

We are seeking a Lecturer who can contribute to the School of Mechanical Engineering's academic mission through research, teaching, and academic citizenship. Candidates should have expertise in computational and numerical modelling, including AI/ML-enabled data-driven approaches, with a focus on surfaces and interfaces

The [School of Mechanical Engineering](#) has over 60 current academic staff and is comprised of [4 research Institutes](#) and delivers a mixture of [undergraduate](#) and [masters level](#) taught degree programmes and has an active [PhD graduate](#) programme.

This role offers the opportunity to develop and sustain a high-quality, internationally recognised research programme aligned with the School's strategic priorities, including active engagement in collaborative, interdisciplinary, and externally funded research.

You will deliver research-informed teaching across undergraduate and postgraduate programmes, contributing to curriculum design, innovation, and enhancement. You will play a key role in fostering an inclusive, engaging, and high-quality student experience, and will support the academic and professional development of students and early-career researchers through effective supervision and mentoring.

In addition, you will contribute to the effective and collegial operation of the School through administrative and service activities, working collaboratively with colleagues and supporting the University's commitment to excellence, equity, diversity, and inclusion. The role may also include teaching or academic engagement in support of the School's transnational education activities, including overseas teaching for up to six weeks in an academic year.

## Main duties and responsibilities



### Teaching:

- 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), which may include teaching overseas for up to six weeks per academic year.
- Providing support, guidance and timely feedback to students, acting as a personal tutor, resolving issues or referring to specialist parties where appropriate.
- Developing and delivering modules and degree programmes within the School, including innovative educational approaches, and participating in module and programme review and quality assurance.
- Supervising undergraduate and postgraduate taught students and contributing to the development of interdisciplinary learning opportunities.
- Helping to implement Faculty and institutional education initiatives, including digital education, internationalisation, and student success strategies.

### Research and Innovation:

- Developing and delivering a planned programme of research and innovation aligned with school and institutional priorities with impact at an international level. This will include:
- Being actively involved in research, innovation and impact at a national and international level, while contributing to local School/Faculty activity.
- Maintaining a record of high-quality research outputs including publications and conference presentations.
- Attracting research funding individually and collaboratively to underpin your research plan.
- Building academic networks to integrate your research area with other research interests within and beyond the School and Faculty.
- Supervising postgraduate research students and contributing to the development of doctoral training environments.

### Academic Leadership and Citizenship:

- Contributing effectively to the administrative processes and committee structures of the School, Faculty, and University through:
- Taking on leadership roles and where appropriate, managing initiatives that facilitate School, Faculty or University performance.



- Carrying out the duties of the post in accordance with the university values of professionalism, inclusiveness, integrity and community supporting the core value of academic excellence

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.

## Qualifications and skills

### Essential

- A PhD in Mechanical Engineering or a closely related discipline, with strong subject knowledge and research expertise relevant to the field.
- A record of high quality research and associated outputs, together with success in securing external research funding or clear potential to do so, informed by a coherent and ambitious research vision in the area of computational and numerical modelling, including AI/ML-enabled data-driven approaches, with a focus on surfaces and interfaces.
- Experience of contributing to, or developing, research networks and interdisciplinary collaborations, with enthusiasm for building productive partnerships within and beyond the University.
- Evidence of delivering engaging, inclusive, and effective teaching at university level appropriate to core and specialist modules in our degree programmes with a commitment to enhancing the student experience through the development of innovative teaching approaches and learning materials.
- Experience of supervising, mentoring, or otherwise supporting the academic and professional development of students and/or early career researchers.
- Excellent interpersonal, communication, and organisational skills, and evidence of some level of contribution to the administrative or managerial activities.
- A clear and demonstrable commitment to supporting and promoting diversity, equity, and inclusion both within and beyond the University, together with a willingness to engage in the wider academic citizenship of the School.

### Desirable

- Experience of contributing to academic leadership at programme, research group, or School level.
- Experience of undertaking outreach, public engagement, or publicity activities that enhance the visibility and impact of academic work beyond the University.



- Experience of PhD supervision, acting as primary supervisor to successful doctoral graduates.
- Experience of building and sustaining partnerships with industrial, professional, and/or public sector organisations, supporting interdisciplinary collaboration, knowledge exchange, and externally funded activity.

## How to apply

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

## Contact information

To explore the post further or for any queries you may have, please contact:

**Professor Stephen Scott**, Head of School

Email: [s.k.scott@leeds.ac.uk](mailto:s.k.scott@leeds.ac.uk)

## Additional information

### Faculty and School Information

The Faculty of Engineering & Physical Sciences brings together internationally recognised research and research-led teaching across engineering, mathematics, chemistry, physics, and computer science, addressing global challenges through interdisciplinary work in a supportive and inclusive learning environment.

Learn more about the research and teaching activities within the [Faculty of Engineering & Physical Sciences](#) and the [School of Mechanical Engineering](#), and the benefits of [working in the Faculty of Engineering and Physical Sciences at the University of Leeds](#).

### Our University

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 Silver Award from [AdvanceHE](#). The [Athena Swan Charter](#) is a framework which is used across the globe to support and transform gender equality within higher education and research.

Our [equity and inclusion webpage](#) 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 [Working at Leeds](#) information page.

### **Information for disabled candidates**

Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found under the 'Accessibility' heading on our [How to Apply](#) information page or by getting in touch by emailing HR via [hr@leeds.ac.uk](mailto:hr@leeds.ac.uk).

### **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 [Criminal Records](#) information page.

