



**Job Title:** Associate Professor in Applied Mathematics  
**Grade:** 9  
**Salary:** £56,048 to £63,059 per annum  
**School:** Computing and Mathematical Sciences  
**Hours/Contract:** Full-time or job share considered, permanent  
**Job Family:** Teaching and Research  
**Reference:** 7846

## Role Purpose

The successful candidate will be expected to make a significant contribution to the research profile of the School in computational mathematics, mathematical modelling, statistics, Artificial Intelligence, data science, or other areas consistent with our existing strengths and future ambitions. You will be expected to undertake high-quality inspirational teaching, tutoring, and project supervision across a range of mathematics and statistics courses. You will contribute to the development of new programmes and courses in mathematics and undertake administrative duties to support School's operations.

## Main Duties and Responsibilities

### Research

- To make a significant contribution to research in mathematics, consistent with the School's existing activities in computational/mathematical modelling, Artificial Intelligence or data science, preferably with applications in Life Science, Space and Earth Observation or related areas.
- To establish a sound research base in order to pursue individual and collaborative high-quality research, consistent with making a full active research contribution at the national and international levels.
- To apply for research funding, either individually or in partnership with colleagues within and outside the University, from various sources including research councils, charities, relevant government bodies and, where appropriate, private organisations.
- To publish research outputs and to disseminate the results of research and scholarship in internationally recognised journals and other appropriate outlets.
- Consistent with the resources available and School and other obligations, to attend and present research findings and papers at academic and professional conferences, and to contribute to the external visibility of the School and the University.
- You will bid for, manage and deliver highly regarded research projects to generate research income that will sustain research support for your specialist area.

### Teaching

- To play an active role in the development and delivery of teaching at both undergraduate and postgraduate levels. This includes the development of course materials as well as providing student support via tutorials and electronic feedback.





- To maintain a broad knowledge of up-to-date research and scholarship in relevant fields to ensure that teaching meets the standards expected within a research-led University.
- To provide tutorial and project support for undergraduate and postgraduate students studying at Leicester.
- To undertake academic duties (e.g., setting examination papers, marking, invigilation and pastoral support of students) required to sustain the delivery of high-quality teaching.
- To support and comply with the University and School teaching quality assurance standards and procedures, including the provision of such information as may be required by the School or the University.

### Administration

- To undertake such specific roles as may be reasonably required by the Head of School (or such persons to whom responsibility may have been delegated).
- To attend School meetings and to participate in other committees and working groups within the School, College and the University to which appointed or elected.
- To participate in relevant professional activities.
- To engage in continuous professional development, for example through participation in relevant staff development programmes.
- To undertake, subject to the agreement of the Head of School and the University as appropriate, external commitments which reflect well upon and enhance the reputation of the School and the University.
- To ensure compliance with health and safety requirements in all aspects of work.

### Internal and External Relationships

Collaboration with researchers at other schools of the University, Space Park Leicester and the University's research institutes, industrial partners and other higher education institutions and schools both nationally and internationally, including Dalian University of Technology (DUT).

Academic, technical and administrative members of staff.

### Planning and Organising

Plan and deliver courses of lectures to undergraduate and taught postgraduate students.

### Qualifications, Knowledge and Experience

#### Degrees

- An undergraduate degree in mathematics, statistics, or related subject \*
- A PhD and/or post-doctoral research track record in an area relevant to the activity of the School in computational/mathematical modelling, Artificial Intelligence or data science \*





## World Changing Research

Applicants should be able to evidence:

- Track record of publication of high-quality research papers with world leading outputs. \*
- Sustained external research income. External income may include collaborative grants as a CoI and innovation-based funding.
- National and/or international recognition for research that positively impacts upon society, economy, culture, industry, government, policy or practice. \*
- Record of high-quality supervision and training of PGRs, and nurturing and supporting colleagues at all career stages. \*
- An emergent record of excellence in research and enterprise leadership.

## Research Inspired Education

Applicants should be able to evidence:

- A credible volume and sustained excellence in leading teaching delivery and assessment – evidenced through both quantitative and qualitative measures \*
- Continual updating of practice to ensure the application of flexible, innovative and appropriate teaching methods in line with the latest educational ideas
- Leading programme review and development which has a sustained positive impact on recruitment and student outcomes (e.g., NSS, continuation, completion & progression metrics)
- Successful leadership and impact in driving innovation and improvement within the provision of education
- HEA Fellowship

## Leadership / Citizenship contribution

Applicants should be able to evidence:

- Engagement with their academic discipline both nationally and internationally evidenced through for example undertaking roles on external committees, reviews and panel, external examining and attendance at conferences \*
- Participation and leadership in School, College or University roles
- Development of self and your colleagues
- Contribution to wider citizenship activities

## Skills, Abilities and Competencies

- Ability to teach and to supervise projects within the general area of mathematics or statistics, at both undergraduate and postgraduate level \*





- High level of proficiency in English (both in writing and verbally), sufficient to undertake research, teaching and administrative activities utilising English Language materials and to communicate effectively with staff and students at the University of Leicester \*
- Good interpersonal skills
- Ability to work flexibly in a team
- Ability to write research grant proposals and high-quality journal papers \*
- Demonstrate commitment to equality, diversity and anti-discriminatory behaviour. (Staff to undertake equality and diversity training and all other mandatory training)
- Willingness and ability to travel and work overseas

***\*Criteria to be used in shortlisting candidates for interview***

### Criminal Declaration

If you become an employee, you must inform your manager immediately, in writing, if you are the subject of any current or future police investigations/legal proceedings, which could result in a criminal offence, conviction, caution, bind-over or charges, or warnings.

### Supporting University Activities

As a University of Leicester citizen, you are expected to support key university activities such as clearing, graduation ceremonies, student registration and recruitment open days. We expect all staff as citizens to work flexibly across the University if required.

### University Values

**Inclusive** - We are diverse in our makeup and united in ambition. Our diversity is our strength and makes our community stronger.

**Inspiring** - We are passionate about inspiring individuals to succeed and realise their ambitions. We challenge our community to think differently, to get involved, and to constantly embrace new ideas.

**Impactful** - As Citizens of Change we will generate new ideas which deliver impact and empower our community

### Equality and Diversity

We believe that equality, diversity and inclusion is integral to a successful modern workplace. By developing and implementing policies and systems that challenge stereotypes across all aspects of our work, we have a culture that recognises and values the diverse contributions of our staff which benefits everyone. Our strong values of inclusivity and equality support our efforts to attract a diverse range of high quality staff and students, and identify our University as a progressive and innovative workplace that mainstreams equality, diversity and inclusion.

