



**Job Title:** Associate Professor in Biological Imaging and AI

**Grade:** 9

**Salary:** £59,966 to £67,468 per annum, pro-rata if part-time

**Department:** School of Engineering

**Hours/Contract:** Full-time or job share, permanent

**Reference:** 12981

## Role Purpose

To establish an independent base for world leading research and research inspired education in the field of Biomedical Imaging and AI.

The role holder will be expected to teach across all Engineering UG and PGT programmes as and when needed taking into their account individual interest whenever possible. They will also be expected to identify potential for developing new programmes as well as collaborative opportunities in expanding our taught programme portfolio. The School of Engineering is a welcoming team of academics with 5 Research Groups working closely together: Aerospace, Biomedical Engineering, Digital Manufacturing and Management (DMM), Green Energy and Transport (GrEaT) and Mechanics of Materials (MoM)

The Lecturer in Biomedical Imaging will predominantly contribute to the Biomedical Engineering Research Group (BERG) but also potentially to DMM and MoM groups depending upon specific research focus.

## Main Duties and Responsibilities

### Research & Enterprise

- To establish a sound research base in order to pursue individual and collaborative, research of high standard and impact, consistent with making a full active research contribution at national and international level.
- To submit fundable applications for research, 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 of international standing 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.
- Provide outstanding support and supervision to postgraduate research students and other early career researchers, promoting an inclusive environment and nurturing the next generation of researchers.
- Foster productive collaborations with academia, industry and policy makers to ensure enterprise and impact opportunities generated from research are developed and exploited.

### Education

- To inspire and motivate students through leading and delivering the planning, organising and delivery of a range of teaching and learning experiences that are tailored to the specific needs of the programme, students, intended learning outcomes and standards set by professional bodies.





- Achieve high student satisfaction, high academic standards and a student-centred approach, promoting professional and inclusive interactions with students within and beyond the classroom.
- Supervise students undertaking major research projects at undergraduate, and taught postgraduate level.
- To develop new course materials where necessary, ensuring the application of innovative and appropriate teaching techniques and materials that embed the latest educational ideas and methods including the use of digital technologies.
- To contribute to the review, development and continuous improvement of the curriculum and in the design and launch of new degrees or other academic awards where appropriate.
- To provide assessment and feedback that fosters student engagement and independent learning, such as setting exam questions and coursework assignments, completing all marking and record-keeping in accordance with School QA procedures.
- To act as a personal tutor for assigned students, providing outstanding mentoring/coaching, pastoral and welfare support where required.
- To adopt a reflective and analytical approach to continuously improve their teaching and learning practice, including ensuring that student feedback on teaching is sought and to respond constructively to such feedback and to advice from colleagues.

### **Administration**

- To undertake such specific school roles as may be reasonably required by the Head of School (or their delegate), discharging these in a proactive and organised way to achieve evidence of impact for students and colleagues.
- To take on appropriate leadership responsibility for an aspect of research or education within the School and to role model collegial behaviour to colleagues.
- To attend school meetings as designated by the Head of School and participate in other committees and working groups as necessary within the school, college and university.
- To proactively manage own continuous professional development, for example through identifying development needs, participation in relevant development activities and critically reflecting.
- Mentor, coach and develop early career academic colleagues both formally and informally.
- To undertake, subject to agreement, external commitments that reflect well upon and enhance the reputation of the university.
- Attend visit and open days, contribute to marketing and outreach
- To ensure compliance with health and safety requirements, equality, diversity, inclusion and corporate social responsibilities in all aspects of work.

### **Internal and External Relationships**

Academic staff within the Group, and the School of Engineering more widely, Professional Services staff in the administration and technical services teams to coordinate research and education activities in your area within the School, the College, and the University.

Collaboration with other schools within the University, industrial partners, and other higher-education institutions and schools both nationally and internationally.





**Planning and Organising**

Responsible for proactively managing own assigned workload and administrative duties to achieve a number of key deadlines through the academic year, including building appropriate contingency for critical tasks and exercising excellent judgement in prioritisation where appropriate. Setting plans and timescales for others when required as part of a leadership or administrative responsibility.

Shaping the strategic direction of your own area of activity, and contributing to the development of school-, college- and university-level strategies, operational planning and implementation of such strategies.

**Qualifications, Knowledge and Experience**

**Essential**

- A good undergraduate degree in engineering, science or applied mathematics\*
- A PhD and/or post-doctoral and/or equivalent industrial research track record in relevant field including data science, artificial intelligence and biological imaging.
- Track record of publication of high quality journal papers rated at 4\* (or equivalent)\*
- Professional Engineering registration as a Chartered Engineer (CEng) or Chartered Scientist (CSci) OR a commitment to obtain this registration.
- Academic Teaching Qualification OR commitment to gain the appropriate category of HEA Fellowship

**Desirable**

- Evidence of the preparation and submission of research funding proposals.
- Evidence of supervision/co-supervision of PhD students in a research-led environment or supervision of graduate engineers conducting major industrial projects.
- Evidence of undergraduate teaching experience including lecturing or co-supervision of undergraduate projects or delivery of analogous training or mentoring in an industrial environment.
- Membership or/and evidence of activity with professional engineering institutions.

**Skills, Abilities and Competencies**

**Essential**

- Proven ability to teach, supervise and assess at university or equivalent professional level\*
- Evidence of the ability to plan and deliver a substantive academic research programme, including the preparation of fundable proposals and lead all aspects of their delivery.\*
- Effective written\* and verbal communications skills
- High level of proficiency in English, sufficient to undertake teaching and administrative activities utilising English Language materials and to communicate effectively with staff and students
- Excellent interpersonal skills, specifically the ability to promote professional and inclusive interactions with students within and beyond the classroom
- Ability to proactively plan and manage own workloads and manage conflicting demands through prioritisation.
- Ability to work flexibly in a team, including in formal and informal leadership roles.
- A commitment to enhancing Equality, Diversity and Inclusivity in the Engineering profession.





### Desirable

- Evidence of the skills and abilities indicating potential for future leadership roles in the School.

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

### Teaching Requirements

If requested, you may be expected to undertake teaching, tutoring and administrative duties across a range of modules, particularly in the delivery of teaching modules in China that are part of the Department’s collaborative partnership programmes in the People’s Republic of China.

### 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 encouraged to support key university activities such as clearing, graduation ceremonies, student registration and recruitment open days. We encourage all staff as citizens to work flexibly across the University if required. If supporting these activities is likely to affect your workload, please speak to your line manager in the first instance

### 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

### Freedom of Speech

The University is committed to upholding freedom of speech and academic freedom within the law throughout our recruitment processes. We ensure that all candidates are considered based on merit and suitability for the role, without regard to their lawful viewpoints or the expression of challenging or controversial ideas. Our recruitment policies and practices are designed to protect applicants from discrimination or adverse treatment on the basis of their opinions, and to foster an environment where open debate and diverse perspectives are valued as essential to our academic mission.

### Equity and Diversity

We believe that equity, 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.

