

Job Title: Associate Professor in Biomechanics of Materials (Teaching and Research)

**Grade:** 9

**Salary:** £57,696 to £64,914 per annum

Department: School of Engineering
Hours/Contract: Full time, permanent
Job Family: Teaching and Research

Reference: 9073

#### **Role Purpose**

In joining the School of Engineering, the successful candidate will draw on extensive academic excellence to underpin and carry out research and teaching activities in the field of biomedical and mechanical engineering, while developing contributions to and achievements in impact, knowledge exchange, leadership and citizenship.

The School of Engineering is a welcoming and inclusive team undertaking interdisciplinary research with academic, clinical, industrial, and community stakeholders, which is driven by our significant strengths in aerospace engineering, biomedical engineering, digital manufacturing and management, and mechanics of materials. Thus we contribute knowledge and innovation that fosters well-being, sustainability and carbon net zero, via our engineering solutions.

The role-holder will join the Biomedical Engineering Group but will also be expected to collaborate with engineering colleagues in other relevant research groups such as Mechanics of Materials (MoM) Group. This post is intended to strengthen and add to research critical mass in areas relevant to biomedical engineering.

The role-holder will contribute to teaching across our engineering programmes as well as make fundamental contribution to our efforts in developing our thought portfolio in biomedical engineering.

# **Main Duties and Responsibilities**

## Research

- Maintain a portfolio of internationally recognised publications that are world-leading in terms of originality, significance and rigour as appropriate to the field or discipline
- Develop the strategic direction in a research area and enhance impact
- Attract research income on an individual or collaborative basis, as appropriate to the field or discipline
- Provide high quality postgraduate supervision and attract research students to the University
- Engage in international research networks, partnerships and collaborations

## Impact and Knowledge Exchange

 Pursue, develop and lead innovation and impact as determined by discipline benchmark to increase the external profile and foster changes in approach











- Engage in external knowledge transfer, enterprise and engagement activities which increase the
  external profile of the discipline and Department/School and have a beneficial impact outside
  the University
- Be recognised as an authority in the field, developing and maintaining an external profile as appropriate to the discipline
- Maintain scholarly activity and keep up to date with developments in the field

#### **Teaching**

- Undertake research-led teaching on undergraduate and/or postgraduate taught courses
- Provide timely formative student feedback and assessment for coursework and examinations
- Contribute to the development, revision and updating of programmes at undergraduate and/or postgraduate, developing teaching techniques and materials
- Engage with scholarship and pedagogical research to underpin innovation at programme level in teaching delivery or assessment practice
- Provide a comprehensive support network for students, including personal tutor support, employability and open days, ensuring Department/School admissions processes are effective
- Work with students to provide world class teaching and learning opportunities and an excellent student experience, regularly collecting and responding to student feedback

# **Leadership and Citizenship**

- Represent the University through membership of significant external committees and groups
- Contribute to management and administration processes and committee structures of the Department/School, College or University
- Be involved in the recruitment, management and development of staff and act as a mentor and coach to colleagues
- Contribute to the development and achievement of Department/School, College or University strategies

### **Internal and External Relationships**

Proactively build networks and collaborations across the School of Engineering, College of Science and Engineering, University and the international research field, for critical discussion and exchange of new ideas and approaches.

Participate in School, College and University wide seminar programmes to stimulate dissemination of information and collaboration.

Represent the University at national/international committees, conferences and meetings.

Work collaboratively with other members of the module delivery team and participate in teaching team meetings.

Coordination with central University offices.











### Planning and Organising

Shape the strategic direction in the research area, developing clear long term (many months/years) plans for sustaining and enhancing the research programme.

Long term planning and organisation of the delivery of teaching and assessment.

Participate in the departmental operational planning process, supporting the strategic direction of the Department/School and College.

### **Qualifications, Knowledge and Experience**

#### **Degrees**

- An undergraduate degree in Engineering or a related subject \*
- A PhD and/or post-doctoral research track record in an area of Engineering relevant to the activity of the School \*

## **World Changing Research**

- 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 Col 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**

- A credible volume of 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













- 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

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

### **Skills, Abilities and Competencies**

#### **Essential**

- High level of proficiency in English, sufficient to undertake research, teaching and administrative activities and to communicate effectively with staff and students\*
- Ability to lead, motivate, develop and manage the performance of a team
- Ability to work independently and as part of a multi-disciplinary team
- Excellent interpersonal skills, to develop networks and form collaborations
- Effective presentation skills
- Ability to develop resource material to enhance teaching quality
- Ability to deliver classes using a comprehensive range of delivery methods, including lectures, seminars and tutoring
- Skills in coaching, mentoring and developing others, including students, early career researchers and colleagues
- Skills in pastoral care and motivation of students
- A commitment to the delivery of a high quality service to students
- Ability to prioritise tasks within agreed work schedules
- Ability to plan, organise, implement and deliver programmes of work

## Desirable

- Ability to teach classes using distance learning
- Ability to provide support to students via Blackboard

## \*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, including the delivery of face-to-face teaching modules at one or more of the College's existing or future partnerships - which may involve international travel.

If international travel is required, we will try to provide you with at least 6 months' notice and where operational requirements permit, personal needs and circumstances will be considered when scheduling travel arrangements.

#### **Academic Career Plan**

Our approach to the career structure encourages a balance between breadth and specialisation. We highlight the central importance of research and teaching while encouraging all colleagues to develop their contributions to and achievements in the areas of impact, knowledge exchange, leadership and citizenship. Further information about the academic career plan is available here.

#### **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

### **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 equity 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 equity, diversity and inclusion.







