

SENIOR LECTURER / LECTURER IN QUANTUM SENSING AND EMERGING TECHNOLOGIES

Job Ref: REQ260526

Successful candidates will have a record of excellence which is contributing to the furtherance of knowledge in their discipline and which is recognised internationally. Candidates must also have a PhD or equivalent research experience and be able to demonstrate a clear trajectory towards achievement at a higher academic level.

School/Department summary:

The Wolfson School of Mechanical, Electrical and Manufacturing Engineering at Loughborough University is one of the largest and most successful engineering schools in the UK, consistently ranked among the top ten for our disciplines. We combine world-leading research with an outstanding student experience, underpinned by long-standing partnerships with industry leaders. Our collaborative and ambitious culture supports colleagues to excel across research, teaching and enterprise in support of the University Strategy, Creating Better Futures. Together.

The School wishes to appoint a Lecturer in Quantum Sensing and Emerging Technologies to strengthen its research and teaching in quantum-enabled technologies and future technologies. Our focus is the engineering, integration, validation and industrial deployment of quantum technologies rather than device fabrication: taking quantum-enabled sensing, instrumentation and measurement systems beyond proof-of-concept into robust, manufacturable practice across manufacturing, defence, healthcare, telecommunications and aerospace. We welcome applications from candidates working across quantum sensing, quantum-enabled measurement and metrology, and the translation and industrial adoption of quantum technologies. The successful candidate will build on the School's capability in RF engineering, sensing, electronic instrumentation and advanced measurement, with significant scope for interdisciplinary collaboration across the University. This post forms part of the School's long-term strategic investment in future and emerging engineering technologies.

Job Description

Please note that this is a generic job description for the position of Lecturer/Senior Lecturer.

Job Family and Grade: Research, Teaching and Enterprise Grade 8 (Senior Lecturer) / Grade 7 (Lecturer)

Job Purpose

To take a leading role in developing and enhancing the research, teaching and enterprise activities in support of the University Strategy, Creating Better Futures. Together.

Job Duties

Research

- To pursue a personal research programme consistent with the research priorities of the School that increases the global visibility and reputation of the University.
- To secure external research funding.
- To supervise and manage research projects.
- To publish the outcomes of research in outlets of international standing.
- To attend and contribute to major international conferences.
- To supervise postgraduate students at Masters and Doctoral levels.
- To collaborate in research initiatives with colleagues both within the University and externally.

Teaching

- To work with colleagues in the School to deliver an exceptional learning environment for students.
- To teach and inspire undergraduate and postgraduate students, and to conduct associated assessments.
- To provide academic and pastoral support to undergraduate and postgraduate students.
- To promote the use of a range of methods and techniques in teaching, learning and assessment.
- To engage in the evaluation and development of modules for which you have responsibility, in terms of content, delivery and assessment.
- To be responsible for the design and content of specific areas of teaching and learning within the School's undergraduate and postgraduate programmes.
- To cooperate with colleagues in the continuous review and development of the School's taught programmes and curriculum.

Enterprise

- To engage with business, public and voluntary organisations through knowledge exchange activities such as student projects and placements, research collaboration, consultancy and specialist training.
- To create social, cultural and economic impact from academic, especially research, activity.
- To secure external funding in support of these activities.
- To seek opportunities for the commercialisation of research and the formation of social enterprises.

Related Activities and Functions

- To work effectively with relevant administrative, technical and academic staff in the School and across the University.
- To carry out specific administrative roles and functions as may be reasonably required.
- To take part in and, on occasion, act as chair of one or more School committees.
- To engage in training programmes in the University (e.g. through Staff Development) which are consistent with your needs and aspirations and those of the School.
- To undertake such other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.

Points To Note

The purpose of this job description is to indicate the general level of duties and responsibility of the post. The detailed duties may vary from time to time without changing the general character or level of responsibility outlined in the document.

Organisational Responsibility

Reports to the: Dean of the Wolfson School of Mechanical, Electrical and Manufacturing Engineering.

Direct Reports: N/A

Budget Responsibilities: N/A

Person Specification

Below you will find the general person specification for a Lecturer/Senior Lecturer role at Loughborough University.

Your application will be assessed based on the essential and desirable criteria listed below.

Applicants are strongly encouraged to explicitly demonstrate how they meet each essential (and desirable) criteria at the application stage. The criteria that you need to demonstrate in your application will be listed as Stage 1 in the table below.

Stages of assessment are as follows:

- 1 – Criteria measured within the Application
- 2 – Criteria measured at Test/Assessment Centre/Presentation
- 3 - Criteria measured at Interview

Essential Criteria

Area	Criteria	Stage
Experience	Evidence of research and/or academic activity in a subject/discipline consistent with the needs of the School.	1
	Experience of working in a high quality academic research environment including experience at post-doctoral level.	1
	Evidence of authoring original work, in the highest quality refereed academic journals.	1
	Candidates from outside of academia must be able to demonstrate the ability to make the transition to becoming a top academic	1,2,3
Skills and abilities	Ability to develop an original research programme on your own initiative and to persuade others of its importance.	2,3
	Ability to identify and develop potential social / cultural / economic impact from professional activity.	2,3
	Knowledge of research and enterprise funding opportunities in UK HE and understanding of how to secure funding.	2,3
	A clear trajectory towards achievements at a higher academic level.	1,2,3
	Excellent communication and interpersonal skills which give you the ability to engage with students, colleagues, business and other agencies on a wide variety of matters.	1,2,3
	Ability to work as part of and to lead a team.	1
Training	Commitment to and evidence of continuing professional development.	1,3
Qualifications	Relevant PhD or equivalent research experience.	1
Other	Uphold and actively contribute to the University's commitment to Equity, Diversity and Inclusion.	1,3

Desirable Criteria: These are skills, experience and competencies that are additional extras that may be used to narrow the pool down if we receive a high volume of applications that meet the essential criteria.

Area	Criteria	Stage
Experience	Experience of presenting research work at international conferences.	1
	Experience of teaching and assessment at undergraduate and postgraduate level.	1,3
	Experience of successfully supervising the projects of taught and research students or company staff at equivalent levels.	1,3
	Experience of work in or in collaboration with the disciplines within the School	1
Skills and abilities	Ability to take part in module and programme development.	3
	Knowledge of the challenges faced in UK HE.	1
Qualifications	Achieved or progressing towards appropriate professional status.	1

Conditions of Service

The appointment will be subject to the [University's Terms and Conditions of Employment](#) relevant to the job grade for Academic and Related staff.

Shared University Responsibilities

As a member of the Loughborough community, you are expected to:

- Take reasonable care of yourself, others and the environment, and to prevent harm by your acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Sustainability Policies & Procedures.
- Support and contribute to the University's commitment to Equity, Diversity, and Inclusion (EDI), while carrying out all duties in a way that respects these principles and upholds the right to free expression. Further information about EDI at Loughborough and our strategic aims is available on our website.

Our Purpose, Vision, and Values

Our purpose, Vision and Values underpin all that we do and shape how we work together at Loughborough.

We're proud to promote our values: **Adventurous, Collaborative, Creative, Authentic** and **Responsible**. Our people bring these values to life every day, and they are central to the positive and supportive culture that makes Loughborough unique.

If you join us, you'll be encouraged to bring these values to life in your own work and contribute to the positive, supportive culture that makes Loughborough unique.

Read more about our [vision and values](#).

Our Accreditations



We strive to create a culture that supports equity and celebrates diversity throughout the campus. The University holds a [Bronze Athena SWAN award](#) which recognises the importance of support for women at all stages of their career.



We are proud to be a [Race Equality Charter Member](#). The Charter aims to improve the representation, progression and success of all minority ethnic staff and students within higher education and address issues of racism within higher education institutions (HEIs).



We are proud to be a Disability Confident Employer and have adopted a proactive approach to employing disabled people and to creating a more diverse workforce. We ensure that our recruitment processes are inclusive and accessible. We guarantee to offer an interview to all applicants who have declared a disability, provided that the essential criteria for the role are met. We proactively anticipate and provide reasonable adjustments and support existing employees who acquire a disability or long-term condition to thrive in the workplace.



We are a real living wage employer, and our Living Wage Employer Mark shows our commitment to paying our staff according to the cost of living.



We are proud supporters of the [City of Sanctuary movement](#) and delighted to be recognised as a University of Sanctuary. This national network brings together, university staff, lecturers, academics, and students, who together work to make Higher Education institutions places of safety, solidarity and empowerment for people seeking sanctuary.

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.