UNIVERSITY OF LEICESTER

Job Summary

Job Title: **Professor in Systems Engineering**
Grade: **10**
Salary: **Competitive**
Department: **School of Engineering**
Hours/Contract: **Full-time or job share and permanent**
Job Family: **Teaching and Research**
Reference: **12337**

Role Purpose

To establish and independent base for world leading research and research inspired education in the field of systems engineering. 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 welcoming and inclusive team of academics with 5 Research Groups working closing together: Aerospace, Biomedical Engineering, Digital Manufacturing and Management, Green Energy and Transport and Mechanics of Materials. The Professor in Systems Engineering will be expected to contribute to research across Engineering Research Groups, but especially Aerospace and Digital Manufacturing and Management. Applicants with research expertise in space systems are particulary welcome to apply for this position as the successful candidate will be expected to build strong research and enterpirse links with the Space Park Leicester.

Main Duties and Responsibilities

World-Changing Research

- To make a significant contribution to research in systems engineering consistent but not limited to existing activities with the Aerospace and Digital Manufactugint and Manafgement Research Groups.
- To engage in interdisciplinary research with UoL partners, prefereably Space Park Leicester and the Instute for Environemnta Futures.
- To produce research outputs of a high standard with best outputs internally and externally assessed as 4* (world-leading in terms of originality, rigour, and significance).
- To secure sustained external research income on an individual and collaborative basis, as appropriate to the field or discipline.
- To engage in research and enterprise leadership, making significant contributions to promoting and embedding an inclusive and respectful research culture.
- To provide high quality PGR supervision and training, contributing to securing funding for postgraduate and early career researchers and increasing PGR recruitment within the subject
- To lead on and contribute to the generation of income and external impact in your area in line with the enterprise agenda (including CPD, working with external organisations, both nationally and internationally, commercialisation, commissioned research and consultancy).

- To provide high quality PGR supervision and training, contributing to securing funding for postgraduate and early career researchers and increasing PGR recruitment within the subject discipline.

Research Inspired Education

- Undertake research-led teaching on undergraduate and/or postgraduate taught courses across the core UG engineering curriculum, and/or specialist areas of the taught PG curriculum, incorporating innovative teaching methods and the latest educational concepts.
- Contribute to the development, enhancement and achievement of the academic strategy in the School, through leading and engaging in activities/projects that drive innovation and have a beneficial impact
- Lead the development, revision and updating of programmes at undergraduate and/or postgraduate level, ensuring that they are inclusive, embed key skills, and incorporate sustainable development goals
- Lead teaching delivery and assessment to ensure consistent high quality teaching practice, providing timely formative student feedback and assessment for coursework and examinations
- Provide support and contribute to shaping a comprehensive range of student support initiatives at School, College, and/or University level, including, placement support, links with industry, personal tutor support, employability activities/projects and open days support
- Work with students to provide world class teaching and learning opportunities and an excellent student experience, regularly collecting and responding to student feedback
- Demonstrate wider educational impact through contributions to projects or scholarly discourse aimed at enhancing pedagogy or improving student outcomes
- Engage with scholarship and pedagogical research to continuously develop own teaching practice and that of others, leading to improved delivery and outcomes, with due regard for sector best practice.

Our Citizens

- Contribute to initiatives and activities that inform national and international policies an decisions, generating a positive impact beyond the University and making a tangible contribution to society.
- Contribute to the practice or debate around policies or practice, based on research evidence and/or scholarly activity.
- Participate in public engagement activities, including authoring articles in non-research publications and online, which raise the external profile of the University and share the benefit of Higher Education and research
- Actively engage with the academic discipline both nationally and internationally, undertaking roles on external committees, reviews and panels and/or contributing to conferences and volunteering initiatives which demonstrate impact beyond the University
- Participate in and undertake leadership roles at School, College, and/or University level contributing to management and administrative processes and committee structures
- Lead and support the recruitment, management and development of staff and students, through coaching, mentoring and supporting recruitment activities

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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

Shaping the strategic direction of your own area of activity in research, enterprise and teaching.

Help develop school-, college- and university-level strategies and contribute to operational planning and implementation of such strategies.

Qualifications, Knowledge and Experience

Essential

- A PhD or equivalent in relevant disciplines such as engineering, physics or mathematics *
- Evidence of a track record of sustained achievement in internationally leading research in systems engineering approach in relevant engineering fields in terms of originality, significance and rigour, that is consistent with the School's aspiration to achieve the highest standards of excellence*
- Evidence of ability to engage in interdisciplinary research *
- Evidence of ability to engage in collaborative research, knowledge-transfer activities or consultancy with industry *

Desirable

- Evidence of excellence in research and enterprise leadership.
- Evidence of collaborative research with leading groups or companies in the UK or abroad.
- Experience in organising seminars, workshops, conferences or other research meetings.
- Academic Teaching Qualification or commitment to gain the appropriate category of HEA Fellowship.

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Skills, Abilities and Competencies

Essential

- High level of proficiency in English, sufficient to undertake research, teaching and administrative activities utilising English Language materials and to communicate effectively with staff and students.*
- Proven ability or potential to generate external funding through research grants, consultancy, knowledge-transfer activities, or other sources to support research and its transition into applications.*
- Proven ability or potential to initiate work independently and as part of a team, both on research and teaching programmes.*
- Proven ability or potential to teach undergraduate and postgraduate students in lectures, tutorials and seminars, and to supervise postgraduate students.*
- Ability or potential to help develop curricula.
- Ability or potential to engage in outreach activities.
- Good written* and oral communication skills, along with presentation and training skills.
- Good interpersonal skills.
- Good time management, personal organization, and interpersonal skills
- Ability to communicate and collaborate with existing staff in the School of Engineering

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.

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.

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

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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.

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.