Job Description

Lecturer in Mechanical Engineering

Salary: Grade 7
Contract: Full time, ongoing
School/Department: (School of Engineering, Mathematics and Physics
Location: Canterbury Campus
Responsible to: Head of School (or nominee)

Job purpose

The School of Engineering, Mathematics and Physics is seeking to appoint a Lecturer in Mechanical Engineering who can help us to deliver an excellent standard of education and contribute to our internationally recognised research and innovation portfolio. We offer a range of programmes across Mechanical Engineering, Biomedical Engineering, Electronic and Computer Engineering, and Electrical and Electronic Engineering disciplines. Our teaching within these disciplines is research-led and incorporates substantial practical, laboratory-based learning.

The successful candidate will contribute to the development and delivery of modules within the Mechanical Engineering course and other programmes, in particular bringing research-informed expertise particularly in fluid mechanics and in thermodynamics and heat transfer. The role is offered on an Education and Research (E&R) contract, appropriate for candidates with a strong research track record, contributing high quality outputs in one of the following research areas:

- Fluid Mechanics
- Thermodynamics and Heat Transfer

Key accountabilities and duties

- Deliver and contribute to the design of high quality, demand-driven and student-centred teaching in a variety of settings, including developing own teaching and learning support materials, methods and approaches to meet the learning objectives and requirements of the programme.
- Assess students' work, monitor progress and provide feedback and guidance.
- Undertake an independent research programme, including supervision of research students, which contributes to the overall research strategy of the University of Kent.
- Disseminate research findings through various means including writing or contributing to internationally excellent papers in high-quality publications and presentations at conferences, furthering the research profile of the school and the external visibility and reputation of the University of Kent.
- Secure funds through external applications for research grants and contracts, individually or in collaboration with others, to support your research programme, research staff and PhD students.
- Collaborate with internal and external contacts, participate in networks and build external relationships to further develop research.
- Act as personal tutor and be responsible for the pastoral care of students within a specified area, provide first line support and refer to services providing further help as appropriate.
- Contribute fully to the School and University, participating in meetings, working groups, committees, and other activities, carrying out administration activities within a supportive and collegial work environment.
- Maintain academic standards and work in accordance with relevant University policies.

Internal & external relationships

Internal: Students, academic, technical and administrative colleagues throughout the School, Head of School, and relevant staff across the wider university community.

External: Relevant external organisations and individuals such as collaborative research partners and funding bodies

Health, safety & wellbeing considerations

This job involves undertaking duties which include the following health, safety and wellbeing considerations:

- Regular use of Screen Display Equipment
- Working with machinery (working with experimental apparatus)
- Pressure to meet important deadlines such as might be inherent in high profile projects
- There may be a requirement to work evenings and weekends

Person specification

The person specification details the necessary skills, qualifications, experience or other attributes needed to carry out the job. Applications will be measured against the criteria published below.

Selection panels will be looking for clear evidence and examples in an application, or cover letter (where applicable), which back-up any assertions made in relation to each criterion.

Essential Criteria:

- PhD in in Mechanical Engineering, or equivalent experience/qualification (A)
- An emerging record of international excellence in research and experience of producing high quality research outputs in Fluid Mechanics or in Thermodynamics and Heat Transfer (A,I,T)
- Experience in the development and delivery of undergraduate and/or postgraduate teaching and assessment in Engineering in a higher education setting (A,I,T)
- Sufficient breadth and depth of specialist knowledge in Fluid Mechanics and in Thermodynamics and Heat Transfer to teach within established undergraduate and postgraduate programmes, and the capacity to communicate this knowledge effectively to students (A,I,T)
- Sufficient subject knowledge to teach outside own specialisms/elsewhere on the programmes (I)
- Ability to develop, deliver and supervise high quality undergraduate and postgraduate research projects in the Mechanical Engineering (I)
- Excellent interpersonal and presentation skills to communicate material of a specialist or highly technical nature and to be effective both orally and in writing at a level appropriate to the activity (I,T)
- Willingness to contribute fully, flexibly and cooperatively as part of the School team (I)
- Willingness to engage in continuous professional development activity (I)
- A firm commitment to fostering a working and learning environment that is respectful, inclusive and values diversity, including diversity of thought, and which enables staff and students from a wide range of backgrounds to thrive (I)

Desirable Criteria:

- A relevant teaching qualification such as PGCHE (*candidates without qualification will be supported to obtain one*) (A)
- Evidence of income generation e.g. through research grants or enterprise activity (A,I)
- Experience of collaborative research (A,I)
- Experience of consultancy, innovation, knowledge exchange or CPD activity within Engineering (A,I)
- Experience of module design and programme administration/management (A,I,T)

- Evidence of contributing to outreach, public engagement or enterprise activities within local and/or professional communities (A,I)

Assessment stage: A - Application; I - Interview; T - Test/presentation at interview stage