

# Candidate Information

Position: Professor

School/Department: Mechanical & Manufacturing Engineering

**Reference:** 22/110444

Closing Date: Monday 5 December 2022
Salary: £86,309 - £101,669 per annum
Anticipated Interview Date: Monday 16 January 2023

**Duration:** Permanent

## JOB PURPOSE:

To shape the research agenda in their own area of specialism and lead future developments which enhance existing activity in aerodynamics, sustainability, clean energy or a closely related field in the School of Mechanical and Aerospace Engineering.

To develop and lead a competitive research program that will complement the ongoing initiatives within the School and across the faculty of Engineering and Physical Sciences. To contribute to development and delivery of cutting-edge educational programs within the School and contribute to the school's administration and outreach activity.

### **MAJOR DUTIES:**

## Teaching:

- 1. Oversee the development and review of teaching provision in the subject area for all students at all levels.
- 2. Develop and teach courses or learning programmes for students at all levels having overall responsibility for their design and quality.
- 3. Lead the development of innovative teaching methods to create interest, understanding, enthusiasm and participation amongst students.
- 4. Plan and review own teaching load and approach to teaching and coach others in doing the same.
- 5. Set and mark coursework, supervise and advise students at all levels.

## Research:

- 1. Plan, establish and lead a research group of outstanding quality and national/international repute which enhances the profile of the School.
- 2. Sustain an extensive track record of published research findings by publishing in refereed journals and presenting at national/international conferences.
- 3. Lead major funding bids which develop, support and sustain research support for the subject area and advance the reputation of the School and the University.
- 4. Continue to develop and expand research in subject area through internal collaborative partnerships and by establishing and fostering strong international links and strategic alliances with leading researchers in the field.
- 5. Develop strategies to attract both national and international research students.
- 6. Direct, mentor and develop research student and staff, where appropriate.
- 7. Ensure that research projects are completed on time and within budget.

## Administration/Contribution to the Community:

- 1. Take responsibility for the appointment, development and management of all staff of all types in the directly managed team when appropriate to do so.
- 2. Take responsibility for the handling of major processes within the School eg with forward planning, financial management, teaching or research quality and admissions.
- 3. Contribute to the running and strategic direction of the University through designated committee representatives or project activities.

#### **ESSENTIAL CRITERIA:**

- 1. A PhD or equivalent in relevant discipline.
- 2. Evidence of:
  - Extensive high level research experience in relevant subject area that are sustainable and which complement or enhance existing profile within the School and across the faculty of Engineering and Physical Sciences.
  - An extensive and sustained track record of research publications over career in high quality, peer reviewed journals that are REF returnable at international level.
  - Extensive track record of obtaining significant research funding over a sustained period.
  - Experience of leading and involvement in research programmes.
- 3. Demonstrable ability to contribute to successful postgraduate student supervision as primary supervisor normally at PhD level.
- 4. Demonstrable breadth and depth of specialist knowledge to teach at undergraduate and or/postgraduate levels across the School UG/PGT provision, aligned with your own area of specialism.
- 5. Demonstrable record of enhancing the quality of learning opportunities and in turn the student experience, with relevant experience of development of taught content, teaching and assessment at undergraduate and/or postgraduate level in a higher education setting.
- 6. Substantial experience of providing academic leadership at a strategic level.
- 7. Contribution to a wider range of administrative tasks at a more strategic level.
- 8. Willingness and ability to contribute to the management of the School.
- 9. Proven ability to provide strategic leadership.
- 10. Proven skills in coaching and developing others in a higher education setting.
- 11. Excellent written and oral communication skills.
- 12. Demonstrable ability to communicate complex information effectively.
- 13. Ability to work as part of large team.
- 14. Demonstrable ability to provide effective leadership.
- 15. Understanding of resource management processes and skills to apply them effectively.
- 16. Willingness to travel and to work unsocial hours as required.
- 17. Demonstrable ability to contribute to the School's international activities.

# **DESIRABLE CRITERIA:**

1. PGCHET or equivalent teaching qualification or membership of professional teaching body e.g. HEA.