Candidate Information

Position:	Lecturer/Senior Lecturer/Reader in Thermofluids
School/Department:	School of Mechanical and Aerospace Engineering
Reference:	22/110095
Closing Date:	Monday 29 August 2022
Salary:	£38,592 - £67,540 per annum.
Anticipated Interview Date:	Week commencing Monday 19 September 2022

JOB PURPOSE:

To deliver an innovative and impactful portfolio of research activity in one of more of the fields of fluid mechanics, thermodynamics, heat and mass transfer, computational fluid dynamics, aerodynamics, or hydrodynamics.

To help shape future undergraduate and postgraduate curriculums across Mechanical Engineering, Aerospace Engineering and/or Product Design Engineering programmes, as well as contribute to interdisciplinary teaching activities across the breadth of the University portfolio, and to support the operations of the School.

MAJOR DUTIES:

Teaching:

1. Utilise and develop a range of teaching methods in the design and delivery of teaching and assessment activities which enhance student employability and reflect skill requirements.
2. As module leader, co-ordinate with others (such as support staff or academic colleagues) to ensure student needs and expectations are met.
3. Contribute to the development of innovative teaching programmes to enhance education within the subject, school and/or faculty.
4. Advocate for, and champion, research led teaching, reflecting emerging practices and techniques and equipping students for the future.
5. Manage all resources required to deliver a quality educational student experience and contribute the University's international reputation.

Research:

1. Conduct and develop research in one of more of the fields of fluid mechanics, thermodynamics, heat and mass transfer, computational fluid dynamics, aerodynamics, or hydrodynamics.
2. Sustain a personal research plan by managing and undertaking research activities.
3. Sustain a high-quality publication record by publishing in refereed journals and presenting at conferences to enhance School's research profile.
4. Develop research proposals and funding bids in collaboration with others as appropriate.
5. Direct, coach and develop research staff and PhD students, where appropriate.
6. Ensure that research projects are completed on time and within budget.
7. Contribute to the School's research reputation by developing networks of research excellence both nationally and internationally.

Administration/Contribution to the Community:

1. Be proactive in developing links with relevant external bodies and create opportunities for future research projects.
2. Provide pastoral care for students within own area to ensure, as far as practicable, that all relevant issues are dealt with in a timely, sympathetic and effective manner.
3. Carry out designated School administrative functions as appropriate to career stage and as allocated by the Head of School.
4. Mentor colleagues and students to support their personal development.
5. Commitment to the School's ethos relating to diversity and inclusion.

ESSENTIAL CRITERIA:

1. Honours Degree or Equivalent in Mechanical Engineering, Aerospace Engineering, Physics, Applied Mathematics or closely related subject.
2. Hold a PhD in a relevant subject.
3. Demonstrate a minimum of 3 years postdoctoral research experience in a relevant research area including, but not limited to, fluid mechanics, thermodynamics, heat and mass transfer, computational fluid dynamics, aerodynamics, or hydrodynamics.
4. Record of high quality, relevant, research publications commensurate with stage of career.
5. Evidence of independent contribution to research projects and outputs and potential to establish an independent sustainable research program.
6. At Senior Lecturer/Reader level evidence of:
   • Successful supervision/mentoring of PhD students and/or research staff.
   • Independent leadership of research projects and outputs, underpinning an independent sustainable research program, including securing external funding to support undertaking research.
7. For appointment to Reader level, candidates will normally be expected to demonstrate evidence of established programmes of excellent research activity in their field of research and international recognition as an expert in their field.
8. Demonstrable breadth and depth of specialist knowledge to teach at undergraduate and or/postgraduate levels across the School UG/PGT provision.
9. At Senior Lecturer/Reader level, evidence 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.
10. Ability to contribute to School or University administrative tasks and to engage in activities that are of service to the wider discipline. At Senior Lecturer/Reader level there should be evidence of successful contribution to administration and service to the discipline.
11. Evidence of ability to contribute to community/outreach, public engagement, or impact-related activities.
12. At Senior Lecturer/Reader level evidence of sustained and impactful contribution to leadership activities and mentoring of colleagues.
13. Ability to communicate and present complex information effectively.
14. Effective interpersonal skills.
15. Ability to enhance student engagement and provide support to students.
16. Ability to work in a team to deliver high quality teaching and research.

DESIRABLE CRITERIA:

1. Completed a Postgraduate Certificate in Higher Education Teaching (or equivalent) qualification.