

Candidate Information

Position: Lecturer in Manufacturing
School/Department: School of Mechanical and Aerospace Engineering
Reference: 23/110589
Closing Date: Monday 30 January 2023
Salary: £38,592 - £53,353 per annum.
Anticipated Interview Date: Weeks commencing 20 & 27 February 2023

JOB PURPOSE:

The post is part of a vibrant team in the School of Mechanical and Aerospace Engineering, driving the development of new and emerging technologies which will have real impact on our economy. The successful candidates will help shape our future undergraduate and postgraduate curriculums across our 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 within their area of competence. The School is at the core of the Advanced Manufacturing Innovation Centre (AMIC) initiative, a new Centre that is part of £1bn co-investment through the Belfast Regional City Deal (BRCD) which will see the delivery of a state-of-the-art Factory of the Future flagship facility, the post holders will engage with the delivery team to define a new world leading innovation centre which will become Northern Ireland's national centre for advanced manufacturing.

MAJOR DUTIES:

Teaching:

1. Develop teaching methods, design course units and deliver teaching and assessment activities including lectures, coursework, practicals, and fieldwork according to own area of subject specialism.
2. Develop approaches to teaching and learning, which are appropriate for the subject area reflect developing practice.
3. Contribute to the enhancement of quality teaching within the subject, school or faculty.
4. Develop and advise others on learning and teaching tasks and methods.
5. Contribute to the design of innovative teaching programmes.

Research:

1. Develop the research activities of the School by sustaining a personal research plan by, managing and undertaking research activities in accordance with a specific project plan in the appropriate research team.
2. Sustain a high quality publication record by publishing in refereed journals and presenting at conferences to assist individual research and so that the School's research profile is enhanced.
3. Develop research proposals and funding bids in collaboration with others.
4. Direct, coach and develop research staff, where appropriate.
5. Ensure that research projects are completed on time and within budget.

Administration/Contribution to the Community:

1. Contribute to the School's outreach strategy by developing external links.
2. Develop links with relevant industries and external bodies to encourage technology transfer opportunities and create opportunities for future research projects.
3. 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.
4. Carry out designated School functions, including, for example, participation in committee work, assisting in the process of admissions, preparation of submission for teaching quality assessment or the REF.

ESSENTIAL CRITERIA:

1. Honours Degree or Equivalent in Mechanical Engineering, Manufacturing Engineering, Mechatronics Engineering, Aerospace Engineering, Computer Science or closely related Engineering subject.

2. Relevant degree with a PhD completed in a relevant subject.
3. Demonstrate a minimum of 2 years postdoctoral research experience in relevant area.
4. Research interests relevant to (but not limited to) digital twins for manufacturing processes; smart design for manufacturing; machine learning for manufacturing applications; manufacturing simulation technologies; robotics for manufacturing; sustainable manufacturing; smart sustainable manufacturing & production systems.
5. Research interests that are sustainable which complement or enhance existing activities within the school.
6. Record of high quality, relevant, research publications commensurate with stage of career.
7. Relevant experience of tutoring and demonstrating at university level.
8. Possesses sufficient 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.
9. Contribution to a wider range of administrative tasks.
10. Contribution to a wider range of community/outreach activities.
11. Evidence of scholarly activity eg conference papers, external funding, book reviews.
12. Ability to negotiate contracts independently or as a leader of a section in major projects.
13. Ability to communicate complex information effectively.
14. Ability to manage resources and staff.

DESIRABLE CRITERIA:

1. Completed a Postgraduate Certificate in Higher Education Teaching (or equivalent) qualification.
2. Sustained teaching experience at University level having ability to design modules and assessment methods.
3. Evidence of good teaching evaluations.