

THE POST

College: Engineering, Mathematics and Physical Sciences

Post: Lecturer (E&R) in Quantum Engineering

Reference No: P63757

Grade: F

Reporting to: Head of Engineering

The above full time post is available immediately on a permanent basis in the College of Engineering, Mathematics and Physical Sciences.

The College of Engineering, Mathematics and Physical Sciences is continuing with a strategy of sustained investment in both academic staff and infrastructure to provide a catalyst for significant growth in both research activity and student experience. In recognition of their pivotal importance to both, the College is looking to attract exceptional candidates to join its dynamic faculty.

Job Description

Main duties and accountabilities

1. To fulfil research, teaching and administration duties as a Lecturer in Quantum Engineering and as part of the Nano Engineering Science and Technology (NEST) group. With research interests in areas such as quantum technology, nano-photonics and –electronics, novel materials, device engineering and related areas.
2. To support the Engineering Department in extending the profile of this research area by attracting and supervising exceptional postdoctoral researchers and postgraduate research students, contributing towards the winning of significant research income, and by undertaking elements of the day-to-day running of undergraduate and postgraduate programmes.
3. To collaborate with colleagues both within the College and the University of Exeter as a whole in order to develop and support NEST group research programmes and other cognate research programmes across the College.
4. To contribute to the general operation of the College as a member of its academic team.

Research

1. To conduct independent research and act as principal investigator and project leader, and in so doing:

- Enhance the College's international reputation through research publications of appropriate quantity and quality, and contribute to worldwide debate at national and international conferences;
 - Win research earnings through carefully prepared and successful grant applications as well as identifying potential income-generating programmes and collaborative partnerships.
2. To supervise research projects, managing any dedicated research staff and postgraduate research students, and provide the mentorship to enable staff and students to develop their skills and academic careers.
 3. To help promote a collegiate working atmosphere and stimulating environment that will attract further research staff of the highest quality as well as good postgraduate research students.
 4. To contribute to the further and ongoing development of research in quantum technology, nano-photonics and –electronics, novel materials, device engineering and related areas.

Education

To deliver undergraduate and postgraduate courses in Engineering, to appropriate academic standards such that:

1. Knowledge acquired from research translates to education
2. Students are challenged but also tutored and supported with individual care
3. Teaching and learning techniques are innovative and inspiring
4. Students are supervised appropriately
5. Assessment criteria are appropriate, and fairly applied with results fed back to students appropriately
6. Module content is continuously reviewed to identify areas for improvement

General

To contribute to the overall general and academic management in the College by undertaking activities that may be required such as:

1. Developing overall academic content and structure of modules with colleagues.
2. Developing ideas for generating income and promoting both the College in general and research in Quantum Engineering in particular.
3. Supporting admissions processes and procedures.
4. Supporting examinations processes and procedures.
5. Contributing to the work of College committees.
6. Contributing to accreditation and quality control processes.
7. Contributing to strategic planning.

This job description summarises the main duties and accountabilities of the post and is not comprehensive: the post-holder may be required to undertake other duties of similar level and responsibility.

Person Specification

The successful applicant will have an independent research programme that will strengthen and complement the existing team at the University. He/she will be able to demonstrate the following qualities and characteristics:

1. PhD in Engineering, Materials Science, Physics or a related discipline.
2. Sufficient knowledge in engineering to develop relevant education and research programmes.
3. A strong record in attracting research funding, or demonstrable potential to attract such funding.
4. A track record of publications in top journals.
5. Teamwork skills to work in collaboration with existing members of the Nano-Engineering Science and Technology (NEST) group, as well as colleagues in the wider College of Engineering, Maths and Physical Sciences.
6. An active and supportive approach to inter-disciplinary and multi-disciplinary research that will help to foster interactions and links both within the University and externally with other educational bodies, professional institutions and employers.
7. The attitude and ability to engage in continuous professional development
8. The aptitude to develop familiarity with a variety of strategies to promote and assess learning.
9. Enthusiasm for delivering undergraduate and postgraduate programmes.
10. The ability and enthusiasm for supervising and supporting undergraduate and postgraduate projects.

Informal Enquiries

Before submitting an application you may wish to discuss the post further by contacting Prof Paul Reynolds, e-mail p.reynolds@exeter.ac.uk or telephone 01392 725820.

Terms & Conditions

Our Terms and Conditions of Employment can be viewed [here](#).

Further Information

Please see our [website](#) for further information on working at the University of Exeter.