

Candidate Information

Position: Lecturer/Senior Lecturer in Wireless Communications

School/Department: School of Electronics, Electrical Engineering and Computer Science

Reference: 24/111558

Closing Date: Monday 26 February 2024
Salary: £41,331 - £68,194 per annum
Anticipated Interview Date: Thursday 21 March 2024

Duration: Permanent

JOB PURPOSE:

This role requires someone with a PhD in Electronic Engineering, Electrical Engineering, Physics, Mathematics or a closely related discipline to undertake research in Wireless Communications, develop and contribute to our ambitious research agenda, and lead University-wide efforts to establish Queen's as an international leader in Wireless Communications research and the application of this research to address global challenges. The post holder is expected to undertake world class innovation, mission-led research programmes and complementing your research, along with contributing to excellent student experience via research led teaching and assessment. The post holder will also contribute to administration or outreach activities, specifically capitalising on the major opportunities available in this area by the recently announced UK Industrial Strategy, UKRI, many European and Global initiatives and ongoing investment in the area via Belfast Regional City Deal (BRCD).

MAJOR DUTIES:

Teaching:

- 1. To contribute to the design delivery and improvement of the schools Computer Science, Computer Engineering and Electronic Engineering curricula.
- 2. To contribute to the school's efforts to develop new teaching delivery methods, including but not limited to new blended learning and research-led teaching methods
- 3. To undertake initiatives to improve the overall student experience, by new methods of assessment, feedback, and student engagement
- 4. To supervise undergraduate and postgraduate taught students in practical and project-based work as appropriate to the relevant courses of study.
- 5. To contribute to student recruitment and student support mechanism

Research:

- 1. To lead and undertake research programme in Wireless Communications, and contribute to secure substantial external funding and develop large, income-generating collaborative and interdisciplinary research activities
- 2. To publish in peer-reviewed national or international journals and conferences in the field of Wireless Communications
- 3. To engage in knowledge transfer and innovation activity and to deliver research impact
- 4. Where appropriate to engage with regional and national Government initiatives in the space of Wireless Communications, notably the UK industrial strategy and UKRI initiatives
- 5. To contribute to the strategic growth and mission of school and research institutes.
- 6. To engage, mentor and develop postgraduate or post-doctoral researchers.

Administration/Contribution to the Community:

- 1. To contribute to the outreach and internationalisation of the School of Electronics, Electrical Engineering and Computer Science (EEECS) at Queen's University Belfast by developing external links
- 2. To carry out designated administrative duties including, for example, committee work, working group leadership or course administration.
- 3. To participate in and support of the Personal Development Review (PDR) process

ESSENTIAL CRITERIA:

- 1. A PhD in Electronic Engineering, Electrical Engineering, Physics, Mathematics (or similar discipline)
- 2. A strong record of research quality, commensurate with career stage in Wireless Communications, including but not limited to: communications systems modelling; channel modelling; fading channels; wireless sensing; joint communications and sensing; multiple antenna systems including MIMO / massive MIMO / XL-MIMO and cell-free massive MIMO; millimetre-wave and THz communications; reconfigurable intelligent surfaces; mobile communications; satellite communications; vehicular communications; wearable communications; wireless sensors.
- 3. High quality publication of excellent research outputs in Wireless Communications.
- 4. Evidence of independent contribution in research projects and outputs and potential to establish an independent sustainable research program.
- 5. Evidence of contribution of research income generation.
- 6. Evidence of contribution to national and international collaborations.
- 7. Evidence of teaching experience include but not limited to undergraduate and postgraduate level teaching, assessment and/or industrial training activities.
- 8. Proven ability to plan and deliver a programme of research and develop techniques, sources of funding and/or proven skills in coaching and developing others in best practice techniques.
- 9. Evidence of social engagement and outreach activities.
- 10. Ability to communicate effectively (in English) complex information to a variety of audiences
- 11. A commitment to creating an inclusive and supportive academic environment enhancing equality, diversity, and supporting early career academics.

DESIRABLE CRITERIA:

- 1. Completed PGCHET (or equivalent) with HEA membership.
- 2. Successful coordination of major research consortia based in the UK, EU, or internationally.
- 3. Significant research measures of esteem in relevant areas depending on academic position.
- 4. Successful enhancement or creation of undergraduate or postgraduate programmes in Wireless Communications.
- 5. Strong Peer-reviews of teaching.
- 6. Teaching awards.
- 7. Experience of participation in Government / Industry advisory groups, funding panels.
- 8. Membership or Senior Membership of learned societies such as IEEE or IET.