



Assistant Professor in Electronic & Computer Engineering
School of Electronic Engineering
Faculty of Engineering & Computing
Fixed Term Three Year Contract

Dublin City University

Dublin City University (DCU) is a young, ambitious and vibrant university, with a mission ‘to transform lives and societies through education, research, innovation and engagement’. Known as Ireland’s ‘University of Enterprise’, DCU is a values-based institution, committed to the delivery of impact for the public good. DCU was named Sunday Times Irish University of the Year 2021.

DCU is based on three academic campuses in the Glasnevin-Drumcondra region of north Dublin. More than 18,000 students are enrolled across five faculties – Science and Health, DCU Business School, Computing and Engineering, Humanities and Social Sciences and DCU Institute of Education.

DCU is committed to excellence across all its activities. This is demonstrated by its world-class research initiatives, its cutting-edge approach to teaching and learning, its focus on delivering a transformative student experience, and its positive social and economic impact. The university continues to develop innovative programmes in collaboration with industry, such as the DCU Futures suite of degrees, which are designed to equip graduates with the skills and knowledge required in a rapidly evolving economy.

DCU’s pursuit of excellence has led to its current ranking among the top 2% of universities globally. It is also one of the world’s Top Young Universities (QS Top 100 Under 50, Times Higher Top 150 Under 100). In the Times Higher Education University Impact Rankings 2021, DCU ranked 23rd in the world for its approach to widening participation in higher education and its ongoing commitment to eradicating poverty, while it ranks 38th globally for its work in reducing inequality and 89th globally for gender equality.

The university is ranked 23rd in the world and first in Ireland for its graduate employment rate, according to the 2020 QS Graduate Employability Rankings. Over the past decade, DCU has been the leading Irish university in the area of technology transfer, as reflected by licensing of intellectual property.

School of Electronic Engineering

The School of Electronic Engineering is a research-intensive school that is home to key researchers in research centres such as CONNECT, Entwine, Insight, and I-Form, in addition to particular strengths in optical and terahertz research, semiconductor characterization, communications, computer vision and medical imaging. The School provides a supportive environment for research, and its PhD research students and postdoctoral researchers produce work of significance at both national and international level. With close industry links, the School’s teaching and research programmes reflect the current and anticipated needs of Ireland’s industrial and commercial sectors, while at the same

time meeting the most rigorous national and international academic standards. For further information, visit: <https://ece.eeng.dcu.ie>

Role Profile

The position holder will report to the Head of School and work closely with other colleagues, including the School Teaching Convenor, the Associate Dean of Teaching and Learning and industry partners. Building positive relationships with professional support staff and technical and pedagogy specialists and engagement with key stakeholders within and outside of DCU, are important aspects of this role.

The appointee will be expected to assist the School, in partnership with the School of Law and Government in the Faculty of Humanities & Social Sciences, in implementing an innovative curriculum project, specifically:

- developing and delivering a new Bachelor's programme, the BSc in Global Challenges, ensuring an industry engaged, research-led approach, integrating challenge-based learning, digital tools, hybrid delivery and inter-disciplinary assessment;
- broader implementation of teaching approaches into other target programmes in the School;
- engaging with university-wide elements of the initiative including cross-faculty cooperation, project evaluation and reporting.

The role includes research and scholarship, teaching, supervision of laboratory sessions, student mentoring and supervision of taught and research projects.

Duties and Responsibilities

The role will encompass duties and responsibilities across the three domains, as listed below but are not confined to the following:

Teaching and Learning

Prepare, deliver and assess a range of core subjects in a manner consistent with DCU's high academic standards and in a hybrid environment that involves elements of on-campus and remote delivery.

Teaching extends to promoting innovation in curricula development. Typical activities include:

- Contributing to the design and development of new programmes;
- Developing and delivering new or reconceptualised modules and resources, including non-traditional, student-centred and challenge-based learning activities, including off-campus aspects to the learning process;
- Designing and assessing examinations and other types of coursework, including hybrid, remote, group and peer assessment;
- Using a wide range of teaching and assessment methodologies that foster a deep approach to learning and equip students with the skills and attributes needed to be lifelong learners, including challenge-based learning and concentrated and immersive learning experiences;

- Co-designing with other academics and industry partners a suite of tools and initiatives that support the transversal skills pathway and embedding transversal skills development, diagnostics and assessments into new and existing programmes;
- Supervision of laboratory sessions, student mentoring and development of virtual labs;
- Proactive engagement with the renewal of existing courses and programmes;
- Engagement with professional development for teaching, particularly in that related to the approaches embedded in student projects.

Research and Scholarship

The appointee will be expected to sustain and conduct research, engage in scholarship of quality and substance, generate research income, supervise postgraduate students and publish to the highest international standard both individually and, where appropriate, in collaboration with colleagues in DCU and elsewhere. The appointee will be expected to have clearly articulated research interests and research profile development plans that support the School's current research priorities, and that will underpin senior modules and projects related to the new degree programme. Candidates with a track record of research in the following areas are of particular interest:

- Power electronics, Automation/control/robotics Systems;
- Electrical systems for Sustainability Engineering;
- Computer and Network Systems Privacy and Security;
- Data Sciences, Data Analytics and Machine Learning in Engineering Applications;
- Web, Cloud and Internet Engineering

Contribution to the School, Faculty, University and Profession

Examples include:

- Engagement with planning, quality review and improvement processes, and external programme accreditations;
- Involvement with appropriate professional bodies and associated initiatives;
- Development and delivery of the international activities of the School including international travel to do so;
- Adoption of some administrative functions related to the activities of the School, the Faculty, and the wider University. Such duties will be defined by the Head of School and may include some of the following: degree programme coordination; participation in committees; visits to students on industrial placement within the DCU INTRA programme; student recruitment.

Qualifications and Experience

- Applicants must hold an honours degree in a relevant discipline, and should be qualified to a postgraduate level with a PhD specialism in Electronic and Computer Engineering, or a related discipline.
- The successful candidates should ideally have a minimum of three years' relevant post-doctoral experience.
- Applicants must have demonstrated teaching experience at undergraduate and/or postgraduate level, ideally including experience in innovative pedagogies and/or assessments, international and/or online or technology-assisted teaching.

- Applications are specifically invited from those with strong research credentials in one or more of the areas listed above.
- The successful applicants will also have demonstrated potential to establish an independent research programme and attract research funding from competitive research funding schemes and/or industry.
- Candidates should demonstrate excellent interpersonal and communication skills consistent with the highest quality of teaching and learning, together with evidence of successful teamwork and a collegial approach

Further Information

More information on the School of Electronic Engineering and its programmes can be found at: <https://www.dcu.ie/electronics>.

Dublin City University is an equal opportunities employer.

In line with the Employment Equality Acts 1998 – 2015, the University is committed to equality of treatment for all those who engage with its recruitment, selection and appointment processes.

The University's Athena SWAN Bronze Award signifies the University's commitment to promoting gender equality and addressing any gender pay gaps. Information on a range of university policies aimed at creating a supportive and flexible work environment are available in the [DCU Policy Starter Packs](#)