

Applications are invited from suitably qualified candidates for the following position

# Assistant Professor in Automation and Industry Robotics School of Mechanical and Manufacturing Engineering Faculty of Engineering and Computing Permanent Contract

## **Dublin City University**

Dublin City University (DCU) is a leading innovative European University, proud to be one of the world's leading Young Universities. DCU is known as Ireland's University of Impact, with a mission to 'transform lives and societies' and focuses on addressing global challenges in collaboration with key national and international partners and stakeholders.

DCU has over 20,000 students in five faculties spread across three academic campuses in the Glasnevin-Drumcondra area of North Dublin. Thanks to its innovative approach to teaching and learning, the University offers a 'transformative student experience' that helps to develop highly sought-after graduates. DCU is currently No. 1 in Ireland for Graduate Employment Rate, and for graduate income (CSO).

DCU is a research-intensive University and is home to a number of SFI-funded Research Centres. The University participates in a range of European and international research partnerships. DCU is also the leading Irish university in the area of technology transfer as reflected by licensing of intellectual property.

As a 'People First' institution, DCU is committed to Equality, Diversity and Inclusion - a University that helps staff and students to thrive. The University is a leader in terms of its work to increase access to education, and is placed in the world's Top 10 for reducing inequalities in the Times Higher Education Impact Rankings.

#### **Overview of the department**

The School of Mechanical Engineering is a thriving and ambitious school, with a strong reputation for attractive Engineering programmes and impactful research. Our programmes are delivered through state-of-the-art practical facilities in our Stokes Building on campus and over the last 10 years, our student numbers on our 4 year BEng and 5 year Integrated MEng programmes in Mechanical & Manufacturing, Biomedical, Mechanical & Sustainability, and Mechatronic (jointly with the School of Electronic Engineering) have more than doubled.

These programmes reflect the strong research focus within the School, which centre around Advanced Manufacturing and Design, Biomedical and Sustainability. We have an excellent track record in research funding, much of which is focused on delivering useful and impactful solutions for both Industry and Society, in addition to academic publication. The strength of this research can be seen in the I-Form and Biodesign Europe centres, which are led by members of the School of Mechanical and Manufacturing Engineering.

The ethos in the School is one of open collaboration between staff and an open-door approach to interaction with students of all levels. We openly encourage students to undertake extra-curricular activities to develop their engineering skills and are currently supporting DCU Solar, as they build an entry for next year's challenge to travel from Belgium to Italy under solar power.

Together with the School of Electronic Engineering and the School of Computing, we form the Faculty of Engineering and Computing, which is a leader in the University in research.

#### **Role Profile**

The School of Mechanical and Manufacturing Engineering is seeking a talented and enthusiastic individual to deliver modules to the taught programmes as agreed annually, but particularly in the space of machine design, industrial automation, pneumatics and hydraulics, industrial robotics and control. Reporting to the Head of School of Mechanical and Manufacturing Engineering, the successful applicant will be expected to develop modules and lead research associated with these aspects of manufacturing, particularly as it interfaces with the current Industry 4.0 and the developing Industry 5.0 paradigms.

#### **Duties and Responsibilities**

The duties and responsibilities of the position include, but are not restricted to, the following:

#### **Teaching and Learning**

The successful candidate will prepare, deliver and assess a range of core subjects in a manner consistent with DCU's high academic standards. Teaching extends to supporting innovation in curricula development. These include:

- Contributing to the design and development of new programmes.
- Developing and delivering new or reconceptualised modules and resources.
- Designing and assessing examinations and other types of coursework.
- Using a wide range of teaching and assessment methodologies which 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, and student mentoring.
- 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 the project.
- Undertake professional development for teaching.
- Engage with the development of working relationships with industry, employers and professional bodies.
- Undertake such administration/outreach duties as will be defined by the Head of School and may include some of the following: degree programme coordination; participation in committees; visits to industry; student recruitment.
- Be goal orientated, collaborative, use their initiative and show leadership potential.

# Research and Scholarship

Successful candidates 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 successful candidate will be expected to have clearly articulated research interests and research profile development plans that support the school's current research priorities and DCU's Strategic Plan, and which will underpin senior modules and projects related to the degree programme(s) or specialism. The successful candidate will be required to:

 Engage with and lead aspects of research and teaching in engineering subjects related to the different programmes in the School of Mechanical and Manufacturing Engineering

- Pursue an active research agenda in the area of School research centres with ongoing research
  publications in leading international academic journals, peer-reviewed conferences, and with
  high-profile book publishers, both individually and, where appropriate, in collaboration with
  colleagues in DCU and elsewhere.
- Undertake professional development in research leadership and management.
- Support the internationalisation agenda of the Faculty and University, including undertaking international travel.
- Engage with the development of working relationships with industry, employers and professional bodies.

## **Service and Contribution to the University and Society**

- Participate in School, Faculty and University committees as opportunities arise
- Engage with external stakeholders (Industry, Community, Policy) to deliver on the DCU mission to transform lives and society.

#### 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**

#### **Essential:**

- A PhD or equivalent (NFQ Level 10) in Engineering, or a related discipline, with ideally a minimum of 2 years relevant post-doctoral experience.
- Strong 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.
- Excellent research credentials and publication record, particularly in one or more of the following research areas: Robotics, Industrial Automation, Industry 4.0 (or I5.0), Control.
- The potential to establish an independent research programme and attract research funding from competitive research funding schemes and/or industry.
- A well-defined research profile development plan, which support the schools current research priorities.
- Excellent interpersonal and communication skills consistent with the highest quality of teaching, learning, research and service.
- Evidence of successful teamwork and a collegial approach, with a willingness to contribute to the development and success of the school.
- Ability to develop and maintain international networks and partnerships within the academic and professional communities.
- An established network of contacts in professional or industry organisations that could benefit the School's engagement with external stakeholders and would enhance teaching and research initiatives.

#### **Essential Training**

The postholder will be required to undertake the following essential compliance training:

- Orientation
- Health & Safety
- Data Protection (GDPR)
- Cyber Security Awareness
- Performance Review & Development (PRD) (People Managers only)
- Al Literacy

Other training may need to be undertaken when required.

Salary Scale: Assistant Professor: €63,311 - €101,461

Appointment will be commensurate with qualifications and experience and in line with current Government pay policy

Closing date: Monday, 7th July 2025

#### **Remote Working Policy**

Since the 1st of November 2024, DCU operates its newly agreed Remote Working Policy. Employees may be approved for up to 2 days of remote working per week (or an appropriate pro rata amount for those part time). Any remote working arrangement will be reflective of the predominant on-campus working environment and the core University value of 'Student Focused'. Employees will be based on campus for the majority of their working week to ensure a sustained on campus engagement and experience. The terms of the remote working policy will apply.

For more information on DCU and our benefits, please visit Why work at DCU?

#### Informal Enquiries in relation to this role should be directed to:

Dr Paul Young, Associate Professor, Head of School of Mechanical and Manufacturing Engineering, Dublin City University.

Phone + 353 (0)1 7008216 Email: <a href="mailto:Paul.Young@dcu.ie">Paul.Young@dcu.ie</a>

Please do not send applications to this email address, instead apply as described below.

# **Application Procedure:**

Please submit your application through the online system at www.dcu.ie/people/jobs, in order to be considered for the role to which you are applying for, you must upload:

- 1) Curriculum Vitae
- 2) Cover Letter
- 3) Completed application form (blank forms can be downloaded from the bottom of the Vacancy).

Please note, if all items are not uploaded, the application will be deemed incomplete, and will not be processed.

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 Silver
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

