



## **JOB DESCRIPTION**

### **Technical Officer / Senior Technical Officer School of Physical Sciences 11-month 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.

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

The School of Physical Sciences at Dublin City University has a high standing within Ireland and internationally, for both its teaching and research activities. There are more than fifty researchers within the School's research groups including postgraduate students, postdoctoral researchers, research officers, research technicians and administrators. The School is home to twenty full-time academic staff. Physics research at DCU covers plasma physics and applications, biomedical physics, microsystems, materials science and physics education as its main priority areas. The School hosts several research centres and notably the National Centre for Plasma Science and Technology (NCPST) [www.ncpst.ie](http://www.ncpst.ie). Research in astronomy takes place within the University approved Centre for Astrophysics & Relativity (CfAR) [www.cfar.ie](http://www.cfar.ie). The School enjoys a long and sustained history of success

in winning substantial research funds and programme grants from Science Foundation Ireland (<http://www.sfi.ie>), the Higher Education Authority PRTL programme ([www.heai.ie/PRTL](http://www.heai.ie/PRTL)), Enterprise Ireland [www.enterprise-ireland.com](http://www.enterprise-ireland.com) and the EU Horizon 2020 and previous EC research programmes, in addition to postgraduate scholarships and postdoctoral fellowships from the Irish Research Council for Science, Engineering and Technology [www.research.ie](http://www.research.ie).

The School of Physical Sciences offers several undergraduate degree programmes, featuring a unique blend of physics fundamentals with modern applications: BSc in Applied Physics, BSc in Physics with Biomedical Sciences, BSc in Physics with Data Analytics and BSc in Physics with Astronomy, all of which are entered via a Physics General Entry programme. A hands-on approach to physics teaching is favoured with an emphasis on laboratory/data skills and the associated mathematical, computer and analytical skills. These programmes are delivered through new and innovative curricula in partnership with key industry collaborators and other Schools across the university. Besides, the School makes important contributions to the curriculum and teaching of the BSc in Environmental Science and Technology and BSc in Science Education programmes. At postgraduate level, the DCU School of Physical Sciences runs the new MSc in Astrophysics & Relativity course jointly with the School of Mathematical Sciences.

### **Role Profile**

The School of Physical sciences will be seeking a Technical Officer[TO] / Senior Technical Officer[STO] to immediately fill a temporary full-time 11-month contract. This person will be employed in our first and second year laboratories in support of our undergraduate practicals. They will report to Assoc. Prof Jean-Paul Mosnier, the head of department.

### **Duties and Responsibilities**

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

- To ensure that teaching and research laboratory equipment and facilities are maintained to a high level.
- To provide laboratory demonstration and technical support for physics undergraduate teaching activities.
- To ensure compliance with health and safety rules and regulations in the day-to-day work environment.
- To procure and maintain inventories of equipment and materials for undergraduate and postgraduate laboratories, including working with DCU purchasing systems.
- To assist academic staff in the development of laboratories and also the design and manufacture of experimental equipment.
- To design, develop and deliver on computer/microcontroller interfacing and instrumentation
- An ability to program in at least one of the following: C++, Sketch, Python, LabView.
- To assist promotional activities such as open days, secondary school workshops and other outreach events.
- To adapt and embrace new technologies associated with a flexible and innovative work environment.
- To interact with colleagues, other University entities, external companies and suppliers in a professional manner.
- To perform any other duties that the Chief Technical Officer or Head of School may allocate as required.

## **Qualifications and Experience**

- Honours Degree in a relevant area (NFQ Level 8). Progression to Senior Technical Officer and beyond requires a Master's Degree qualification or equivalent.
- A number of years relevant educational/industrial experience is highly desirable.
- Expertise/experience, or keen interest in education and information technology.
- Demonstrable track record of working independently.
- A proven ability to work as part of team.
- Excellent Social, communication and IT skills.

## **Essential Training**

The postholder will be required to undertake the following mandatory compliance training: Orientation, Health & Safety and Data Protection (GDPR). Other training may need to be undertaken when required.