Technical Officer / Senior Technical Officer (Manufacturing)
Faculty of Engineering and Computing
School of Mechanical and Manufacturing Engineering
Permanent 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 Mechanical and Manufacturing Engineering

The School of Mechanical & Manufacturing Engineering has been at the forefront of Teaching, Learning, Research and Innovation in Engineering since its establishment in 1987. Current programmes include Mechanical and Manufacturing Engineering, Biomedical Engineering, Mechatronics Engineering and Mechanical and Sustainability Engineering. The School is a research-intensive school that is home to key researchers affiliated to research centres including I-Form, Insight, ESIPP, MEDeng and the Water Institute, and has particular strengths in Biomedical Engineering, Advanced Manufacturing and Sustainable Systems and Energy. At postgraduate levels, the school offers taught Master's programmes with Majors in Biomedical Engineering, Simulation Driven Design and Mechanical and Sustainability Engineering, each also with a pathway integrated with Bachelor's degrees.

Role Profile

The School of Mechanical and Manufacturing Engineering is seeking to appoint a Technical Officer / Senior Technical Officer with responsibility for manufacturing (including its Engineering Workshop) to join its team of highly skilled Technical Staff. Our manufacturing infrastructure and staff support undergraduate, masters and postgraduate students across all years and is instrumental in curriculum redevelopment, project support, research activity and outreach programmes. The technical team also supports first year project work, second year design and CAD, third year product design modules and fourth year, Masters and PhD project rig manufacture. As part of the School's contribution to the broader Faculty, the manufacturing team also supports needs (as they arise) in our sister Schools of Electronic Engineering and Computing.

Research at national and international level is also supported by our workshop staff including the SFI funded I-Form Advanced Manufacturing Programme, the new Centre for Doctoral Training (CDT) in Advanced Metallics Systems and large scale rig design and manufacture for our strategic themes of Sustainability, Advanced/Innovative Manufacturing and Bio-medical engineering. Rigs are also manufactured for open days, NRF projects, other university research centres and external clients. Recent capital investment has resulted in the purchase of specialised machining equipment (CNC 3 axis machines) and redevelopment of undergraduate project labs and specialised final year project space. 3D printing suites, CAD labs, Solid-works suites all form part of the enhanced capacity and support offered by our manufacturing team.

Principle Duties and Responsibilities

The successful candidate will join the team of Technical Officers with responsibility for manufacturing in the school, while also contributing to a range of other activities.

- They will have excellent technical, communication and interpersonal skills. He/she
- Have a flexible approach to work and a willingness to assist with new developments in line with Faculty/University Strategy.
- The candidate should also have a strong record of appropriate technical competence and hands-on experience in a specialised high precision workshop environment.

- An excellent knowledge of health and safety legislation as it pertains to workshop facilities, the ability to work with faculty, researchers and students at all levels and excellent IT skills are also required.
- The ability to prioritise work, work to tight deadlines and take responsibility for project deliverables is key to this role.

The candidate will have a role in mentoring, training and teaching related to design and CAD, manufacturing, projects, creativity and innovation and student demonstrations. The appointee will also contribute to redevelopment of technical content within programmes, offering advice on Advanced Manufacturing Techniques, Advanced Measurement methods, 3D Printing of Advanced Materials and innovative manufacturing. The appointee will be expected to contribute directly to teaching and training, supervision of CAD/Project sessions, student mentoring and advice related to capstone projects. Specifically, the successful applicant will be required to (inter alia):

- Champion continuous technical improvement, set standards and engender flexibility within the team.
- Have oversight of maintenance and operation of specialist equipment to the highest standard.
- Manage materials, stock control, tooling and purchasing formalities.
- Champion the importance of Health and Safety amongst all staff and students.
- Assess risk and put appropriate control measures in place. Ensure follow up action is taken to remove hazards and risk.
- Communicate effectively on the development needs of the workshop technical team and drive technical innovation across the team.
- Expand internal and external activities of our workshop while supporting the manufacturing needs of our Faculty.
- Interest in the design, commissioning and supervision of a student maker space.

Qualifications and Experience

Essential Criteria

Applicants for Technical Officer must hold an NFQ Level 8 degree or equivalent qualifications in Mechanical Engineering or have a minimum of five years' experience in a modern mechanical engineering workshop working as a Toolmaker/Fitter/Turner.

Applicants for the Senior Technical Officer must hold an NFQ Level 9 degree or equivalent qualifications in Mechanical Engineering or have a minimum of eight years' experience in a modern mechanical engineering workshop working as a Toolmaker/Fitter/Turner.

- Experience in the programming and operation of CNC machines is essential as is the ability to use 2D and 3D CAD software and CNC programming based software.
- Teaching experience and/or a willingness to generate and engage with online teaching platforms and technology assisted learning.

The candidate should also have:

- Excellent technical, communication and interpersonal skills. He/she will also have a flexible approach to work and a willingness to assist with new developments in line with Faculty/University Strategy.
- A strong record of appropriate technical competence and hands-on experience in a specialised high precision workshop environment.
- An excellent knowledge of health and safety legislation as it pertains to workshop facilities, the ability to work with faculty, researchers and students at all levels and excellent IT skills are also required.
- The ability to prioritise work, work to tight deadlines and take responsibility for project deliverables is key to this role.

Further Information

More information on the School of Mechanical and Manufacturing Engineering and its programmes can be found at https://www.dcu.ie/mechanicalengineering/school-of-mechanical-manufacturing-engineering

Essential Training

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

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