



## JOB DESCRIPTION

<b>Research Centre</b>	School of Mathematical Sciences
<b>Post title</b>	Postdoctoral Researcher Financial Mathematics
<b>Level on Framework</b>	Level 1
<b>Post duration</b>	Fixed Term Contract 24 months

### **Dublin City University**

Dublin City University [www.DCU.ie](http://www.DCU.ie) 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 and Transformation', it is committed to the development of talent, and the discovery and translation of knowledge that advances society and the economy. DCU is the Sunday Times Irish University of the Year 2021.

The University is based on three academic campuses in the Glasnevin-Drumcondra region of north Dublin. It currently has more than 18,000 students 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 creating a transformative student experience, and its positive social and economic impact. This exceptional commitment on the part of its staff and students has led to DCU's ranking among the top 2% of universities globally. It also consistently features in the world's Top 100 Young Universities (currently in QS Top 70 Under 50, Times Higher Top 150 Under 100).

DCU is placed 84th in the world, in the Times Higher Education University Impact Rankings – measuring higher education institutions' contributions towards the UN Sustainable Development Goals. Over the past decade, DCU has also been the leading Irish university in the area of technology transfer, as reflected by licensing of intellectual property.

As part of this role, the researcher will be required to participate in the DCU Research Career Framework. This framework is designed to provide significant professional development opportunities to Researchers and offer the best opportunities in terms of a wider career path.

### **The School of Mathematical Sciences**

The School of Mathematical Sciences in Dublin City University offers undergraduate and post-graduate degree programmes in Actuarial Mathematics and Financial Mathematics, in addition to service Mathematics courses across all five Faculties of the University. The School faculty has a

longstanding commitment to excellence in research in Stochastic Analysis and Financial Mathematics, attracting funding from the European Research Council and Science Foundation Ireland. The School also cooperates with UCD and Maynooth University in the Financial Mathematics and Computation Cluster.

### **Role Profile**

The School of Mathematical Sciences at Dublin City University seeks to appoint a Postdoctoral Researcher in Financial Mathematics as part of the research project *Stationary Financial Risks*, supported by Science Foundation Ireland, and headed by the Stokes Chair of Financial Mathematics, Prof. Paolo Guasoni.

### **Principal Duties and Responsibilities**

The Postdoctoral Researcher will:

- Conduct a specified programme of research under the supervision and direction of the Principal Investigator
- Engage in the dissemination of the results of the research in which he/she is engaged with the support of and under the supervision of the Principal Investigator
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University
- Engage in teaching and teaching support as assigned by the Head of School under the direction of the Principal Investigator
- Liaise with internal and external stakeholders, including industry and academic partners and collaborators
- Carry out administrative work within the research programme as necessary

### **Minimum Criteria**

Applicants should have a PhD in Mathematics or related discipline, and demonstrate an interest in solving problems in Finance.

In addition, it is preferable that the candidate:

- Has a proven publication record in Financial Mathematics or Stochastic Processes.
- Be capable of working independently with a high degree of technical ability whilst also being a team player
- Has excellent social, communication and organisational skills.

### **Candidates will be assessed on the following competencies:**

- **Discipline knowledge and Research skills** – Demonstrates knowledge of a research discipline and the ability to conduct a specific programme of research within that discipline.
- **Understanding the Research Environment** – Demonstrates an awareness of the research environment (for example funding bodies) and the ability to contribute to grant applications

- **Communicating Research** – Demonstrates the ability to communicate their research with their peers and the wider research community (for example presenting at conferences and publishing research in relevant journals) and the potential to teach and tutor students.
- **Managing & Leadership skills** - Demonstrates the potential to manage a research project including the supervision of undergraduate students.

### **Essential Training**

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

