

# **MSc in Mathematics Education**

## **Postgraduate Research Opportunity**

School of Mathematical Sciences, Dublin City University

Department of Mathematics and Statistics, Maynooth University

### **Project description:**

We are seeking a postgraduate research candidate to join a team of researchers working on a project entitled 'Assessment for Learning Resources for First Year Undergraduate Mathematics Modules'. This project concerns the development of formative assessment techniques in order to improve the teaching and learning experience of first year undergraduate mathematics modules.

The work to be undertaken will have two main components: the development of formative assessment tools for use in the classroom; and the development of interactive tasks which can be used by students to monitor their own progress and this progress will be supported by the provision of online resources. The candidate would conduct a research and literature review of best practice in the area of student surveys, interviews and both qualitative and quantitative data analysis. He/She would also assist in the design of tasks and in the evaluation of all innovations designed for this project, as well as the implementation of the surveys and interviews, and with the analysis, collation and dissemination of the results.

This project is funded by the National Forum for the Enhancement of Teaching & Learning in Higher Education, and the partner institutions on this project are Dublin City University (DCU), Dundalk Institute of Technology (DkIT), Athlone Institute of Technology (AIT), and Maynooth University (MU). The project can be based in either the School of Mathematical Sciences in DCU, or in the Department of Mathematics and Statistics in MU, at the student's choice.

### **Prerequisite qualifications:**

- A 2.2 or higher in primary degree, in the area of mathematics, mathematics education, science education, or statistics, or a postgraduate qualification in these areas.
- For full details of DCU or MU entry requirements for postgraduate research, see <http://www.dcu.ie/registry/postgraduate/index.shtml#Entry> or <https://www.maynoothuniversity.ie/study-maynooth/postgraduate-studies/how-apply>

### **Start date and duration:**

The successful candidate can commence as soon as possible following application processing and approval. The MSc by research is expected to take 24 months full-time. The option of transferring to the PhD register can be discussed with the supervisors, and is dependent on satisfactory progression.

**Funding:**

- €21300 per year for two years to include University fees and a monthly stipend.
- Note that if the project is extended to a PhD, no funding is currently available for the remaining period of the studentship. However, there will be tutoring opportunities in either institution and further funding could be sought during the course of the PhD, but is not guaranteed at this time.
- A small amount of additional funding is available for conference attendance, and equipment.

**Supervisors:**

Dr. Ciarán Mac an Bhaird, Department of Mathematics and Statistics, MU.

Dr. Eabhnat Ní Fhloinn, School of Mathematical Sciences, DCU.

**Expressions of Interest:**

Interested parties should send a detailed CV, along with contact details for two academic referees, to [ciaran.macanbhaird@nuim.ie](mailto:ciaran.macanbhaird@nuim.ie) or [eabhnat.nifhloinn@dcu.ie](mailto:eabhnat.nifhloinn@dcu.ie) by **Friday, 30<sup>th</sup> January 2015**. Any queries should also be directed to these addresses.

The successful candidate will be required to submit a formal application to DCU or MU via the Postgraduate Applications Centre ([www.pac.ie](http://www.pac.ie)) - please visit the relevant Graduate Studies Office website for more information.