



**TUS**

**Technological University of the Shannon:  
Midlands Midwest**  
Ollscoil Teicneolaíochta na Sionainne:  
Lár Tíre Iarthar Láir

[www.tus.ie](http://www.tus.ie)

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## POSTGRADUATE RESEARCH OPPORTUNITY

**Project Title:** Investigating the role of spatial ability within technology education in Ireland

**Project Description:**

Over the last 40 years, studies have continually indicated the importance of spatial ability in STEM learners. However, a gap exists in this claim as STEM has largely been studied in the contexts of Science, Engineering, and Mathematics education. It is only recently, within the last 5 years, that the role of spatial ability within technology education has begun to be systematically examined.

This project therefore aims to qualify the importance of spatial ability within technology education in the Irish secondary level education system. In Ireland, technology education relates to the subjects of Graphics, Wood Technology, Applied Technology, and Engineering at Junior Cycle, and Design and Communication Graphics, Construction Studies, Technology, and Engineering and Senior Cycle. The subjects of Graphics and Design and Communication Graphics will be the focal subjects in this project. The project will examine the relationship between levels of spatial ability and performance in graphics educations, whether taking these subjects relates to change in learners' levels of spatial ability, and whether spatial ability is more or less associated with certain signature activities or topics studies in graphics classrooms.

**Duration of Project:** 48 months

**Funding Agency:** TUS Presidents Doctoral Scholarship

**Type of Degree Offered:** PhD

**Minimum Qualifications/Experience Necessary/Any Other Requirements:**

Candidates who will hold a primary degree in the following or aligned fields on or before 1<sup>st</sup> October 2022:

- Technology education
- Educational psychology
- Cognitive psychology

Minimum classification of *2.1 honours or equivalent*.

IELTS [International English Testing System] Applicants must have a minimum of 6.0 with no component score less than 6.0.

**Research Supervisors:**

- Dr Jeffrey Buckley (*Technological University of the Shannon, Ireland & KTH Royal Institute of Technology, Sweden*)
- Dr Rónán Dunbar (*Technological University of the Shannon, Ireland*)
- Dr Niall Seery (*Technological University of the Shannon, Ireland*)

**For further information please contact:** Dr Jeff Buckley ([jbuckley@ait.ie](mailto:jbuckley@ait.ie))

**Download Application Form at**

<https://www.ait.ie/research-and-innovation/postgraduate-research-opportunities>

Closing date for receipt of completed application forms is Friday 11<sup>th</sup> June 2022.

Please submit your completed application: [pro@ait.ie](mailto:pro@ait.ie)

Please reference **Project Title in all correspondence.**