

# Doctoral research fellowship in University Mathematics Education

A fixed-term full-time position as a PhD Research Fellow in Mathematics Education is available at the University of Auckland, Faculty of Science, Department of Mathematics. The fellowship is offered for a period of three years. The position is located at Auckland City Campus. The intended starting date is July 2020, or to be negotiated with the Mathematics Education Unit.

The Mathematics Education Unit (MEU) in the Department of Mathematics has been internationally renowned for its first-tier research in university mathematics education (RUME). RUME is a vibrant field, interest in which has been on the rise since the last few decades. RUME is concerned with a wide range of aspects and issues, such as a transition from school to university, the learning processes and experiences that university students go through, and modernisation of pedagogies in a digital era. The importance of RUME cannot be overestimated in light of its potential to impact lives of individuals, communities, and societies, whose wellbeing and prosperity largely depend on mathematical knowledge, skills, and appreciations of university graduates.

We are inviting new PhD students to join our research projects focusing on mathematics learning and teaching practices at tertiary level. We have a rich variety of ongoing projects differing in their foci, aims, and methodologies. Some of them explore learning and teaching that unfold in the context of specific mathematical concepts (e.g., integrals, vector spaces), processes (e.g., exemplifying, proving, posing and solving routine and non-routine problems), and mathematical disciplines (e.g., calculus, linear algebra, graph theory, topology). Other projects are aimed at testing innovative pedagogies and resources that are targeted at transforming students' learning experiences. Our empirical projects are rooted in contemporary mathematics education theories, methodologies, and pedagogies.

Candidates for the fellowship are expected to have a solid mathematical background (at least at the undergraduate level) and experience in mathematics education, either from academic studies or practice. Successful fellows will benefit not only from full coverage of tuition fees and a tax-free stipend but also from a vibrant research culture and interactions with mathematicians at the Department and scientists at the Faculty, many of whom are international leaders in their fields. The University of Auckland is a recipient of a five star plus QS Stars University Rating for excellence in the categories of research, employability, teaching, facilities, internationalisation, innovation and inclusiveness. The global Mercer's Quality of Living Survey rated Auckland among three the most liveable cities in the world in respect to personal safety, environment, transportation, health and other factors.

## Application procedure

1. Explore the MEU [website](#), our research [profiles](#), and personal [websites](#). Please contact us for more details about our research interests and Dr Igor' Kontorovich for general details about the fellowship.
2. By 15 December 2019 (NZ time) email your application to Dr Igor' Kontorovich [i.kontorovich@auckland.ac.nz](mailto:i.kontorovich@auckland.ac.nz) and Dr Tanya Evans [t.evans@auckland.ac.nz](mailto:t.evans@auckland.ac.nz) consisting of your: (a) curriculum vitae; (b) recent academic transcript, and (c) cover letter that elaborates on your background, specifies your doctoral and post-doctoral ambition, and explains how your envisaged PhD research aligns with the interests of MEU. Shortlisted candidates might be invited for an interview via video-conference.
3. A successful candidate would be expected to go through the usual application [process](#) for doctoral studies. The fellowship is subject to the University approval of the formal application.

# FAQs

## Why New Zealand?



**Q: The fellowship is advertised for three years. Is it really possible to complete a PhD degree just in three years?**

A: UoA provides one of the quickest pathways in the world towards a doctoral degree. Yes, it is possible to get an internationally-renowned PhD just in 3 years! See this [link](#) for details and do not miss the part on the perks of being an international student in New Zealand.

**Q: How much money are we talking about?**

A: The fellowship covers annual tuition fees, student services fees, and an annual tax-free stipend of 27500 NZD for three years.

**Q: Are there additional scholarships at UoA?**

A: Of course! UoA proposes a variety of [scholarships and awards](#) that are worth exploring. International students should also explore funding opportunities that exist in their home countries for studying abroad.

**Q: Are doctoral students allowed to work?**

A: The advertised fellowship is intended for full-time studies. Depending on the visa conditions and the agreement that will be reached with the PhD supervisors, there might be an opportunity to work at the Department of Mathematics for a few hours per week.

**Q: New Zealand is really far away. Is it possible to become a part of the international mathematics education community from there?**

A: The 25-year history of the MEU proves that distance is not a barrier to making a significant contribution and playing leading roles in the international research community. Doctoral studies at UoA are structured in a way that encourages students to participate in international scholarly activities and offers financial support for it. Additional funding can be sought through multiple external and internal opportunities that exist in the Department.

**Q: Wouldn't I be scientifically isolated in Auckland?**

A: The MEU is vibrant research group that offers a variety of postgraduate programs to Honours, Masters of Science, Masters of Professional Studies, and PhD students. We work closely with our students and are proud of the close attention that we pay to their research journeys. We maintain close relations with the Statistics Education Unit at the Department of Statistics, Mathematics Education group at the Faculty of Education and Social Work, as well as with relevant communities in the broader Auckland region. Furthermore, MEU is actively involved in collaborative projects with researchers from all over the world who frequently come for a visit. Here is a partial list of recent visitors: Mathew Inglis, Anna Sfard, Barbara Jaworski, Ferdinando Arzarello, Merrilyn Goos, Celia Hoyles, Richard Noss, Alan Schoenfeld, Frank Lester, Michele Artigue, and others.

**Q: What is it like living in Auckland, New Zealand?**

A: Auckland offers an attractive lifestyle. The city is built on a narrow isthmus between two harbours and is surrounded by 11 dormant volcanoes and numerous picturesque islands. Auckland is nicknamed the 'City of Sails' because of the high number of yachts that sail in the harbours and the adjoining Hauraki Gulf. To the west of the city, the Waitakere Ranges rainforest forms a gateway to magnificent west coast surf beaches and an abundance of forest walks. [Auckland](#) is a city with a rich cosmopolitan mix of peoples and temperate climate.