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Lecturer in Mathematics
Teaching and Research

Position Level	Level B
Faculty/Division	Science
Position Number	00197848/ 00197849
Original document creation	03/June/2024

Position Summary

The School of Mathematics and Statistics currently has more than eighty continuing academic staff and more than thirty research staff as well as visiting academics. UNSW is the only university in Australia to be ranked in the top 100 in the world in mathematics and statistics by each of the four ranking bodies: CWTS Leiden, ARWU, USNews, QS. The School embodies a broad range of research interests in the areas of applied and pure mathematics and statistics. The School has particular research strengths in Algebra, Analysis, Biomathematics, Combinatorics, Computational Mathematics, Dynamical Systems and Integrability, Finance and Risk Analysis, Geometry, Mathematical Modelling, Mathematical Physics, Number Theory, Ocean and Atmospheric Sciences, Optimisation, Stochastic Modelling and Fractional Calculus. More broadly, the School also has research strengths in Statistics in the areas of Bayesian and Monte Carlo Methods, Biostatistics and Ecology, Data Science, Nonparametric Statistics, Stochastic Analysis. The School's research groups are interconnected, with frequent interactions between groups and with other schools and faculties both within and outside UNSW.

The purpose of this role is to conduct independent research and deliver excellent teaching in the School of Mathematics and Statistics. A Lecturer (level B) academic is expected to carry out activities to develop their scholarly research in areas that align with the research strengths in the School and professional activities both nationally and internationally and to actively contribute to the School's teaching activities across a range of undergraduate and postgraduate courses.

The role reports to the Head of Pure Mathematics or the Head of Applied Mathematics depending on the research area of the candidate, and has nil direct reports.

Accountabilities

Specific responsibilities for the role include:

- Actively carry out high quality and high impact research in the areas that align with the research strengths in the School with a view to publication in influential and high-impact scholarly journals.

- Work both collaboratively and independently on research grant proposals and applications to national competitive grant agencies and other funding bodies.

- Develop research collaborations within the School as well as links with other groups on campus and/or industry as appropriate. This is expected at both national and international levels.

- Actively disseminate research findings at seminars and conferences within the School, the UNSW environment, nationally and internationally.

- Supervise Honours and Masters Course Work projects; and supervise PhD and Masters Research students.

- Contribute to the design of programs and courses. Deliver high quality teaching, using appropriate pedagogical methodologies and technologies. This requires teaching both mathematics and a wide range of non-mathematics students and courses at all levels, including Honours and Masters level courses.

- Actively participate in school activities and demonstrate an ability and willingness to take on leadership roles in the School.

- Undertake administrative duties as specified by the Head of School and participate in School, Faculty and/or University committees as required.

- Actively engage with industry and the community to develop significant productive relationships, attract industry funding and participate in professional activities if required.

- Work collaboratively with peers across the Faculty and UNSW in all aspects of academic endeavour and contribute to mentoring of other staff.

- Align with and actively demonstrate the [UNSW Values in Action: Our Behaviours](#) and the [UNSW Code of Conduct.](#)

- Cooperate with all health and safety policies and procedures of the university and take all reasonable care to ensure that your actions or omissions do not impact on the health and safety of yourself or others.

Skills and Experience

- PhD or equivalent qualification in relevant mathematical sciences.

- Demonstrated research ability in an area of applied or pure mathematics, which aligns with the research directions in the school.

- Evidence of teaching effectiveness and passion for educational excellence.

- Evidence of research collaborations.

- Capacity to conduct productive research at an international level.

- Strong publication record in top, peer-reviewed journals.

- Demonstrated ability to produce high quality external grant applications.

- Ability to supervise PhD students and willingness to undertake any compliance and supervisor training as required.

- Experience in student supervision including, for example, Honours and Masters and vacation scholar projects.

- High level oral and written communication skills and ability to network effectively and interact with a diverse range of students and staff.

- Demonstrated ability and willingness to deliver high quality and innovative teaching and student experience to both undergraduate and postgraduate students.

- A track record of significant involvement with the profession and/or industry.

- Demonstrated ability to work in a team, collaborate across disciplines and build effective relationships.

- An understanding of and commitment to UNSW's aims, objectives and values in action, together with relevant policies and guidelines.

- Ability and capacity to implement required UNSW health and safety policies and procedures.

PRE-EMPLOYMENT CHECKS REQUIRED FOR THIS POSITION

- Verification of qualifications

About this document

This Position Description outlines the objectives, desired outcomes, key responsibilities, accountabilities, required skills, experience and desired behaviours required to successfully perform the role.

This template is not intended to limit the scope or accountabilities of the position. Characteristics of the position may be altered in accordance with the changing requirements of the role.