



School of Mathematics and Statistics  
Faculty of Science

# Position Description

<b>Level:</b>	<b>B/C</b>	<b>Date:</b>	<b>May 2018</b>
<b>School/Unit:</b>	<b>Mathematics &amp; Statistics</b>	<b>Faculty/Division:</b>	<b>Science</b>
<b>Written by:</b>	<b>HoS/School Manager</b>		

## JOB PURPOSE

The Lecturer or Senior Lecturer conducts research - in areas that align with the research strengths in the School; and contributes actively to the School's teaching activities across a range of undergraduate and postgraduate courses.

## ORGANISATIONAL ENVIRONMENT

The School of Mathematics and Statistics currently has more than sixty 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. It has particular research strengths in Algebra and Number Theory, Bayesian and Monte Carlo Methods, Biomathematics, Biostatistics and Ecology, Combinatorics, Computational Mathematics, Dynamical Systems and Integrability, Finance and Risk Analysis, Functional and Harmonic Analysis, Geometry, Mathematical Physics, Nonparametric Statistics, Ocean and Atmospheric Sciences, Optimisation, Stochastic Analysis, Stochastic Modelling and Fractional Calculus. The School's research groups are interconnected, with frequent interactions between groups and with other schools and faculties both within and outside UNSW.

The School teaches approximately 10,000 individual students in 150 active courses in science, engineering and other areas. For administrative purposes, it is split into departments of Applied Mathematics, Pure Mathematics and Statistics.

The School's undergraduate programs cover a wide spectrum of courses in Applied Mathematics, Pure Mathematics, Statistics and Data Science. Its postgraduate programs include coursework degrees (at Graduate Diploma and Masters levels) and vigorous research programs leading to MSc and PhD degrees. Currently the School has about 80 postgraduate students, of whom approximately 50 are enrolled in the PhD program. Over the past thirty years, the School has graduated more than two hundred research students, many of whom have gone on to distinguished careers in Australia and throughout the world.

## REPORTING RELATIONSHIPS

**Supervisor:** The Lecturer or Senior Lecturer reports to the Head of School via the Head of Department

### **Level B (Lecturer)**

- Actively carry out 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 with industry
- Develop research collaborations nationally and internationally
- 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
- Teach mathematics courses to a range of audiences at the University
- Teach specialist Honours and Masters level courses
- Contribute to the design and delivery of the School's teaching programs and courses
- Actively participate in School activities and demonstrate an ability and willingness 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
- 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

### **In addition to the above, Level C (Senior Lecturer) is expected to fulfil the following duties:**

- Significant role in research projects including, where appropriate, leadership of a research team
- Perform senior administrative duties as specified by the Head of Department or Head of School
- Assume a major role in planning or committee work

## **SELECTION CRITERIA**

### **Level B (Lecturer)**

- PhD or equivalent qualification in relevant mathematics sciences
- Demonstrated research ability in Applied Mathematics, Pure Mathematics, or Statistics, which align with the research directions in the School
- Evidence of effective teaching experience
- Evidence of research group collaborations
- Capacity to conduct productive research at an international level
- Strong publication record in top, peer-reviewed journals
- A record, or demonstrated ability, of success in external research funding
- Ability to supervise PhD students
- Experience in student supervision including, for example, Honours and Masters and vacation scholar projects
- Excellent oral and written communication skills
- Excellent leadership skills, including competence in modelling behaviors that align with the University's values and the ability to foster these in staff, students and the broader University community

- Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training

**Additional Essential criteria for Level C (Senior Lecturer) appointment**

- A substantial record of publications in top, peer-reviewed journals
- Evidence of supervision of PhD students
- Strong dedication to independent research and research leadership
- Demonstrated record of competitive external research funding
- Strong track record of successful postgraduate supervision

It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.