



POSITION DESCRIPTION

Academic Positions

(In addition to the Position Classification Standards)

Position Title:	Tibra Foundation Chair in Mathematical Sciences	Level: E
Faculty/Division:	Engineering and Information Sciences	
School/Unit:	School of Mathematics and Applied Statistics (SMAS)	

Primary Purpose of the Position:

This named Research Chair is an ongoing Level E appointment funded as a Research-Only Fellowship for the first 5 years by the Tibra Foundation, with the goal of promoting the importance and impact of research excellence and capacity in the Mathematical Sciences. The Chair will establish and lead a world-leading research program in the area of computational statistics and applications within UOW's National Institute for Applied Statistics Research Australia (NIASRA), which resides in the School of Mathematics and Applied Statistics (SMAS).

The Chair will also contribute to the Tibra Foundation's mission through outreach activities, including public lectures and prize-award events, and through participation in and organisation of scientific events that will further raise the profile of UOW's research programs in the Mathematical Sciences. They will contribute to SMAS' teaching through a light load of higher-level relevant undergraduate, honours and masters topics, and undertake some undergraduate and postgraduate research supervision. They will contribute to the promotion of mathematical and statistical skills and thinking in the wider community through mentoring of nominated scholars.

Position Environment:

The position will be based in the School of Mathematics and Applied Statistics (SMAS), which includes the National Institute for Applied Statistics Research Australia (NIASRA). Data and decision science is a major university priority, encapsulated in the University's Data and Decision Science Network (DDSN) initiative, which NIASRA will lead, and the new flagship Bachelor of Data Science and Analytics degree, which comprises a rigorous 3-year program of statistics, computer science and mathematics and is taught by SMAS.

SMAS has research strength in each of Pure Mathematics, Applied and Financial Mathematics, and Applied Statistics. Our research capacity in Statistics is housed in NIASRA, which incorporates five research centres: the Centre for Bioinformatics and Biometrics; the Centre for Environmental Informatics; the Centre for Sample Survey Methodology; the Statistical Consulting Centre; and the newly established Centre for Health and Social Analytics. NIASRA's objective is to achieve excellence in applied statistics research by undertaking high-quality and high-impact research, consulting, and professional education and training in advanced statistical methodology. It collaborates extensively with researchers in government and industry and also within UOW on selected projects. The engagement with industry is particularly strong within Australia and internationally, and it involves developing long-term collaborative research partnerships and repeat research contracts with a variety of organisations. It is supported through its own dedicated High-Performance Computing facility and IT support. NIASRA aims to further improve its international profile and contribute to the University's objective of maintaining and improving its position in the top 1% of universities worldwide. Staff members also participate in the teaching program in Statistics in undergraduate and postgraduate courses and subjects.

Major Accountabilities/Responsibilities:

Responsibilities		Outcome
1.	Provide leadership and focus in the development of world-leading research in computational statistics.	Increased research activity and research capacity in NIASRA.
2.	Undertake fundamental research, grant-based and/or contract/consulting research involving relevant statistical methods which may involve collaboration both internal and external partners.	High-quality research papers in highly-ranked indexed journals, and relevant reports produced in a timely manner. Major external funding secured.
3.	Contribute to outreach and promotion of the Mathematical Sciences supported by UOW's outreach team, and in cooperation with the Tibra Foundation and with SMAS' outreach program.	Delivery and/or scientific organisation of public lectures and other events. Awarding of prizes in local schools.
4.	Supervision of Research Students including Honours, Masters & PhD students	Successful completions of PhD and Masters by research students.
5.	Teaching undergraduate and honours/masters-level subjects offered by SMAS. Preparation and presentation of short courses in areas of expertise and interest. For the first five years, this will be limited an equivalent of no more than one subject over the course of any given year, and will focus on topics related to relevant research areas of interest and expertise.	Successful delivery of undergraduate honours-level, post-graduate subjects and short-courses.
6.	Research mentoring in Statistics for Tibra Foundation Research Mentoring Program.	Research-mentoring meetings with nominated individuals.
7.	Supervisory roles: Communicate and consult with staff on workplace and staffing matters.	To foster direct relationships with staff and enhance engagement with the organisation.
8.	Observe principles and practices of Equal Employment Opportunity	To ensure fair treatment in the workplace
9.	Have WH&S responsibilities, accountabilities and authorities as outlined in the http://staff.uow.edu.au/ohs/commitment/responsibilities/ document	To ensure a safe working environment for self & others.

Reporting Relationships:

Position Reports to:	Head, School of Mathematics and Applied Statistics
The position supervises the following positions:	HDR Students, Research Fellows
Other Key Contacts:	Tibra Foundation Board; Director of NIASRA and Data and Decision Science Network

Key Relationships:

The person would be expected to make significant contributions to the relevant Faculty, School and Centre meetings as well as those contacts detailed below:

Contact/Organisation:	Purpose & Frequency of contact
Tibra Foundation Board	Regular
Exec Dean, EIS Faculty	As needed
Head, School of Mathematics and Applied Statistics	Regular
Head of relevant academic and research units in SCIT and SMART	As needed
Director of NIASRA and co-directors of DDSN	As needed

Key Challenges:

1. Leading a world-class research program in computational statistics.
2. Growing research interactions with relevant units and with the Data and Decision Sciences Network.
3. Producing high-quality and high-impact research and obtaining external research funding.
4. Contributing to the Tibra Foundation's mission of promotion and advocacy for enhanced mathematics and statistics capabilities in Illawarra and Australia more broadly.

SELECTION CRITERIA - Knowledge & Skills:

Essential:

- High level of ability and commitment to effectively leading a statistical research program.
- High level of ability and commitment to communication, advancement and advocacy of the mathematical sciences.
- An active research programme in statistics.
- Demonstrated ability to successfully supervise research students and early career researchers.
- Demonstrated ability to effectively teach advanced statistics at the undergraduate and postgraduate level.

Desirable

- Interest and ability to develop a research programme in computational Bayesian statistics

SELECTION CRITERIA - Education & Experience:

Essential:

- A PhD in a relevant field of statistics, or equivalent skills and experience.
- Extensive experience in developing and applying statistical methods in large and complex projects and datasets.
- Internationally competitive track record in statistical research.

Desirable:

- Eligible to be an Accredited Statistician with the Statistical Society of Australia.
- Expertise in statistical methods for large datasets.

Personal Attributes:

- Well-developed leadership, interpersonal and communication skills.
- Demonstrated ability to work with staff in a range of disciplines and organisations.
- Demonstrated ability to work in a team environment.
- Timely, proactive, independent, approachable and enthusiastic.

Special Job Requirements:

May be required to work outside of normal hours, and undertake travel for work purposes.

May be required to work outside of standard business hours or across campuses and research partner facilities.

Organisational Chart:

Organisational Chart to be confirmed displaying role in context within HSCG

Roles and Responsibilities in Relation to Workplace Health and Safety:

The University of Wollongong is committed to providing a safe and healthy workplace for its workers, students and visitors. All members of the University community have a collective and individual responsibility to work safely and be engaged in activities to help prevent injuries and illness.

In addition to the major accountabilities/responsibilities required for your position, you also hold the following roles and responsibilities in relation to Workplace Health and Safety:

All Staff

- Take reasonable care for your health and safety as well as others.
- Comply with any reasonable instruction by the University.
- Cooperate with any reasonable policies and procedures of the University including reporting of hazards or incidents via the University reporting process.
- Certain staff have specific responsibilities for Work Health and Safety (WHS), further information is available in the document [Roles And Responsibilities for WHS](#) and [WHS Management System](#).

Additional Responsibilities for Staff with supervisory responsibilities

- Ensure work area, equipment and practices are compliant with applicable legislation, standards, codes of practice and University guidelines.
- Ensure risk management activities are undertaken to minimise WHS risk including hazard and incident reporting, risk assessment and safe work procedures.
- Provide the necessary instruction, information, induction, training and supervision to enable work to be carried out safely.
- Ensure Work Health and Safety (WHS) activities and requirements are implemented for area as outlined in the [Roles And Responsibilities for WHS](#) and [WHS Management System](#).

Inherent Requirements:

This position description outlines the major accountabilities/responsibilities and the selection criteria against which you will be assessed as suitable for the position. As such there will be specific job requirements that we refer to as Inherent Requirements.

Inherent Requirements refer to your ability to:

- Perform the essential duties and functional requirements of the job;
- Meet the productivity and quality requirements of the position;
- Work effectively in a team or other type of work organisation concerned; and
- Do the job without undue risk to your own or others' health, safety and welfare at work.

If you have any injuries, illness, disorder, impairment, condition or incapacity that may affect your ability to perform the inherent requirements of the position, we encourage you to discuss this with the University to assist in the process of identifying reasonable adjustments to enable you to perform the duties of the position. The University wants to place you in the best situation to use your skills effectively in the position you are applying for at the University.

POSITION CLASSIFICATION STANDARD - Research Only

Level: E
Title: Professorial Fellow

Description

A position classification standard describes the broad categories of responsibility attached to academic staff at different levels. The standards are not exhaustive of all tasks in academic employment, which is by its nature multi-skilled and involves an overlap of duties between levels. **Therefore the standards should not be applied mechanistically. Quality of performance is the principal factor governing level of appointment of individuals, and a broadly worded skill base is set out for each level.**

All levels of academic staff can expect to make a contribution to a diversity of functions within their institutions. Such functions include teaching research participation in professional activities and participation in the academic planning and governance of the institution. The balance of functions will vary according to level and position and over time.

- General Standard
- Specific Duties
- Skill Base

General Standard

A Level E academic is expected to exercise a special responsibility in providing leadership and in fostering excellence in research, teaching and policy development in the academic discipline within the department or other comparable organisational unit, within the institution and within the community, both scholarly and general.

Specific Duties

Specific duties required of a level E academic may include

- Provision of a continuing high level of personal commitment to, and achievement in, a particular scholarly area.
- The conduct of research.
- Fostering the research of other groups and individuals within the department or other comparable organisational unit and within the discipline and within related disciplines .
- Development of research policy.
- Supervision of the program of study of honours students or of postgraduate students engaged in course work.
- Supervision of major honours or postgraduate research projects.
- Making a distinguished personal contribution to teaching at all levels.
- The conduct of tutorials, practical classes, demonstrations, workshops, student field excursions, clinical sessions and studio sessions.
- The preparation and delivery of lectures and seminars.
- Consultation with students.
- Marking and assessment.
- Playing an active role in the maintenance of academic standards and in the development of educational policy and of curriculum areas within the discipline.
- Developing policy and being involved in administrative matters within the department or other comparable organisational unit and within the institution.
- Participating in and providing leadership in community affairs, particularly those related to the discipline, in professional, commercial and industrial sectors where appropriate.

Skill Base

A Level E academic shall have the same skill base as a level D academic but will be recognised as a leading authority in the relevant discipline area.