

## POSITION DESCRIPTION

### Academic Positions

*(In addition to the Position Classification Standards)*

Position Title: Research Fellow Level: A  
 Faculty/Division: Engineering and Information Sciences  
 Department/Location: School of Mathematics and Applied Statistics

#### Primary Purpose of the Position:

The appointee will carry out research on an ARC-funded research project "The effect of bans on short selling: a comprehensive study" directed by Prof. Song-Ping Zhu. This is an applied mathematical project in the area of quantitative finance, and the appointee will be expected to work with Prof. Song-Ping Zhu and with Dr Wenting Chen to implement the program outlined in the proposal.

#### Position Environment:

The financial mathematics research group within the School of Mathematics and Applied Statistics is a very active and high-profile research. With several staff members actively carrying out research in this area, it provides a dynamically-interactive intellectual environment for this project to be carried out successfully. Valuable discussions with other experts in the area of financial mathematics facilitate the exchange of research ideas and help to overcome obstacles encountered as the proposed project unfolds. The Research Assistant will become a member of this community and will contribute to its ongoing research program and profile.

The School of Mathematics and Applied Statistics (SMAS) at UOW has recently identified the research in the area of financial mathematics as one of the strategic areas that the School would like to develop. Several initiatives have been taken to ensure that teaching and research activities are encouraged in this area. These initiatives include establishing a Centre of Mathematical Finance, establishing a new Master of Financial Mathematics degree and conducting some interdisciplinary research jointly with staff in the Department of Accounting and Finance at UOW.

The appointee will work collaboratively with members of the team, and will produce concrete research outcomes in the form of papers published in internationally recognised journals. Opportunities for joint supervision of project students will be available.

#### Major Accountabilities/Responsibilities:

Responsibilities		Outcome	Office Use Only
1.	Carry out research in the area of the project	refereed publications	
2.	Work collaboratively with the CIs	coauthored publications	
3.	Contribute to the knowledge base of the research group	presentation of seminars	
4.	Publicise the work of the team at meetings	conference presentations	
5.	Assist in the preparation of project reports	reports	
6.	Comply with the university's research reporting requirements	publications logged in database	

7.	Help junior members of the research group with their projects	assistance acknowledged	
8.	Observe principles and practices of Equal Employment Opportunity	To ensure fair treatment in the workplace	
9.	Have OH&S responsibilities, accountabilities and authorities as outlined in the <a href="http://staff.uow.edu.au/ohs/commitment/responsibilities/document">http://staff.uow.edu.au/ohs/commitment/responsibilities/document</a>	To ensure a safe working environment for self & others.	

### Reporting Relationships:

Position Reports to:	Prof. Song-Ping Zhu
The position supervises the following positions:	None
Other Key Contacts:	Dr. Wenting Chen

### Key Challenges:

1. To produce original research of lasting significance
2. To publish high quality journal papers
3. To contribute to an enthusiastic and productive research team

### SELECTION CRITERIA - Knowledge & Skills:

Essential:

- A strong mathematical background and professional computer programming skills, such as MATLAB
- The ability to work harmoniously and effectively as a member of a research team
- The ability to complete research projects and write up the results in a publishable form

Desirable

- Familiarity with financial crisis, data analysis, various quantitative methods in finance

### SELECTION CRITERIA - Education & Experience:

Essential:

- A PhD in a relevant area of mathematics (if not held then an offer will be contingent upon completion)
- Experience in writing up the results of mathematical research for publication

Desirable

- Some background in quantitative finance

### Personal Attributes:

The appointee will be expected to work as an integral part of a research team. This will require substantial interpersonal skills, and a willingness to share ideas and experiences.

### Organisational Chart:

Please attach an up to date organisational chart to this position description.

The appointee will be supervised Prof. Song-Ping Zhu. She or he will work closely with Dr. Wenting Chen. Career Development Interviews will take place in conjunction with the Head of School, currently Prof. Song-Ping Zhu.

**Approval:**

Approved by Head of Unit: \_\_\_\_\_

Date: \_\_\_\_\_

Approved by Personnel: \_\_\_\_\_

Date: \_\_\_\_\_

## POSITION CLASSIFICATION STANDARD - Research Only

Level: A  
Title: Associate Fellow

### Description

A position classification standard describes the broad categories of responsibility attached to research-only academic staff at different levels. The standards are not exhaustive of all tasks in research-only academic employment, which is by its nature multi-skilled and involves an overlap of duties between levels. The standards provide an adequate basis to differentiate between the various levels of employment and define the broad relationships between classifications.

Progression through an academic career will normally be based on research, teaching, administrative functions and contribution to the profession. The balance of functions will vary according to level and position over time. It is only in exceptional circumstances that promotion would be solely on the research only position classification standards.

- General Standard
- Specific Duties
- Skill Base

### General Standard

A Level A research-only academic is expected to contribute towards the research effort of the institution, and to develop her/his research expertise through the pursuit of defined properties relevant to the particular field of research.

### Specific Duties

Specific duties required of a Level A research-only academic may include

- The conduct of research under limited supervision either as a member of a team or, where appropriate, independently, and the production or contribution to the production of conference and seminar papers and publications from that research.
- Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise.
- Limited administrative functions primarily connected with the area of research of the academic.
- Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff.
- Occasional contributions to teaching in relation to his/her research project(s).
- Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures.
- Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental and/pr faculty meetings and/or membership of a limited number of committees.
- Advice within the field of the staff member's research to postgraduate students.
- A Level A research-only academic shall work with support, guidance and/or direction from staff classified at Level B and above and with an increasing degree of autonomy as the research academic gains in skill and experience.

### Skill Base

A Level A research-only academic will normally have completed four years of tertiary study in the relevant discipline or have equivalent qualifications or research experience. In many cases a position at this level will require an honours degree or higher qualifications or equivalent research experience. Research experience may have contributed to or resulted in publications, conference papers, reports or professional or technical contributions which give evidence of research potential.