



LECTURER IN FINANCIAL MATHEMATICS

DEPARTMENT/UNIT	School of Mathematical Sciences
FACULTY/DIVISION	Faculty of Science
CLASSIFICATION	Level B
WORK LOCATION	Clayton campus

ORGANISATIONAL CONTEXT

Everyone needs a platform to launch a satisfying career. At Monash, we give you the space and support to take your career in all kinds of exciting new directions. You'll have access to quality research, infrastructure and learning facilities, opportunities to collaborate internationally, as well as the grants you'll need to publish your work. We're a university full of energetic and enthusiastic minds, driven to challenge what's expected, expand what we know, and learn from other inspiring, empowering thinkers. Discover more at www.monash.edu.

The **School of Mathematical Sciences** is one of the largest of the five Schools in the Faculty, and has close working collaborations with other Schools/Departments such as Physics and Astronomy, Earth, Atmosphere and Environment, Computer Science; and other faculties such as Business and Economics, Arts, Medicine, IT and Engineering. The School has strong links with outside institutions such as CSIRO, the Defence Science and Technology Organisation, and the National Australia Bank and a large number of research institutes and universities around the world.

The School is multidisciplinary with very active groups in algebra and discrete mathematics, analysis and geometry, applied mathematics, financial mathematics, fluid dynamics, statistics and stochastic processes, numerical analysis and scientific computing, PDEs, operations research, optimisation, machine learning, and mathematical biology. The School provides undergraduate teaching for students in the Faculties of Science, Engineering, Information Technology and Pharmacy and Pharmaceutical Sciences, as well as postgraduate training in its key areas of research. The School has approximately 65 Academic and Research staff, 150 Teaching Associates, 5 Professional staff, 61 PhD and 56 Masters Students.

In particular, the School is currently expanding massively its reach in the area of financial mathematics by:

- The creation of a Master of Financial Mathematics
- Developing partnerships with financial institutions
- Developing its academic research activity, in particular in the areas of stochastic control, computational finance, and systematic investment strategies

POSITION PURPOSE

The Lecturer will contribute to the applied and financial mathematics teaching effort of the University and will carry out activities to develop and maintain scholarly research and/or professional activities relevant to the

mathematical sciences. Research areas of interest include stochastic control, computational finance, and systematic investment strategies.

We are seeking outstanding researchers who can apply/develop mathematics to practically relevant problems arising in quantitative finance. We are also interested in researchers who are able to promote their research to the professional sector.

Reporting Line: The position reports to the Head of School

Supervisory Responsibilities: Honours and/or postgraduate students

Financial Delegation: Not applicable

Budget Responsibilities: Not applicable

KEY RESPONSIBILITIES

Specific duties required of a Level B academic may include:

1. The conduct of tutorials, practical classes, demonstrations, workshops, student field excursions, clinical sessions and/or studio sessions
2. Initiation and development of subject material. Development of course material with appropriate advice from and support of more senior staff
3. Acting as subject coordinators; the preparation and delivery of lectures and seminars
4. Supervision of the program of study of honours students or of postgraduate students engaged in course work
5. Supervision of major honours or postgraduate research projects
6. The conduct of research
7. Involvement in professional activity
8. Marking and assessment
9. Consultation with students
10. A range of administrative functions the majority of which are connected with the subjects in which the academic teaches
11. Attendance at departmental, school and/or faculty meetings and/or membership of a number of committees

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
 - PhD in a related area of mathematics

Knowledge and Skills

2. Demonstrated capacity to engage in outstanding research consistent with the strengths and strategic directions of the School
3. Ability to supervise postgraduate research students
4. Potential to earn income through external research granting bodies
5. Ability to develop and deliver innovative and exciting teaching in mathematics to students at all levels and backgrounds
6. Demonstrated capacity to work constructively and collaboratively with colleagues in furthering the aims of the School

7. Demonstrated oral and written communication skills
8. Ability to represent the School and the discipline in their dealings with internal or external groups
9. Ability to work in research or teaching teams in a multidisciplinary environment
10. A strong record of research publications, relative to time since PhD completion
11. Professional experience in a relevant financial institution will be highly regarded

OTHER JOB RELATED INFORMATION

- Travel to other campuses of the University may be required
- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted
- A current satisfactory Working With Children Check is required

LEGAL COMPLIANCE

Ensure you are aware of and adhere to legislation and University policy relevant to the duties undertaken, including: Equal Employment Opportunity, supporting equity and fairness; Occupational Health and Safety, supporting a safe workplace; Conflict of Interest (including Conflict of Interest in Research); Paid Outside Work; Privacy; Research Conduct; and Staff/Student Relationships.