

Actuarial and Financial Mathematics PhD

Delivery: Full Time, Part Time

Programme type: Research

Study location: Edinburgh

Introduction

Actuarial and Financial Mathematics is one of the main research areas within our Mathematical Sciences grouping. PhD opportunities are aligned with the research interests of our academic staff and are broadly as follows:

- Risk management
- Actuarial mathematics
- Finance & insurance interface
- Pension metrics
- Stochastic asset models
- Pricing & hedging of derivative securities

The school also hosts the Actuarial Research Centre with funding from the Faculty of Actuaries Endowment Fund, which acts as the focus for postgraduate research and training in actuarial science and quantitative risk management in Scotland.

www.sfra.ac.uk/ARC/

Programme duration

A PhD programme normally lasts for 3 years as a full time student. Part-time options are available.

Research

Additional information

We are part of the [Maxwell Institute for Mathematical Sciences](#), a joint research institute bringing together within a single body the research activities of :

- The [Department of Mathematics](#) at Heriot-Watt University
- The [Department of Actuarial Mathematics](#) at Heriot Watt University
- The [School of Mathematics](#) at the University of Edinburgh

The institute obtained excellent results in the most recent Research Assessment Exercise, [RAE 2008](#).

We are part of the [Edinburgh Research Partnership in Engineering & Mathematics](#), alongside Edinburgh University, which consists of five joint research institutes and a joint graduate school.

We work closely with the financial services industry via the [Scottish Financial Risk Academy](#).

Entry requirements

Contact Professor Andrew Cairns to discuss further: A.J.G.Cairns@hw.ac.uk

Or for more general information, please send an email enquiry to: MACSpgenquiries@hw.ac.uk

English language requirements

If your first language is not English, or your first degree was not taught in English, we'll need to see evidence of your English language ability. The minimum requirement for English language is IELTS 6.5 or equivalent. We offer a range of [English language courses](#) to help you meet the English language requirement prior to starting your masters programme:

- 14 weeks English (for IELTS of 5.5 with no more than one skill at 4.5);
- 10 weeks English (for IELTS of 5.5 with minimum of 5.0 in all skills);
- 6 weeks English (for IELTS 5.5 with minimum of 5.5 in reading & writing and minimum of 5.0 in speaking & listening)

Tuition fees

Status*	Full-time	Part-time
Home/EU	Research council fee TBC	
Overseas	Â£13420	Â£6970

* If you are unsure which category you fall in to, you should complete a [fee status enquiry form](#), which allows us to assess your fees.

** Fee per course

Scholarships & bursaries

- [Commonwealth Scholarship and Fellowship Plan](#)
International (Commonwealth citizens)
- [Commonwealth Scholarships Scheme](#)
Candidates from developed Commonwealth countries (see below)
- [EPSRC Doctoral Training Awards](#) (MACS)
UK nationals and EU nationals with residence qualifications
- [East Lothian Educational Trust](#)
Applicants must be a resident of the old county of East Lothian (ie excluding Musselburgh, Wallyford and Whitecraig.)
- [GoEuro Scholarship Programme](#)
Enrolled students in any academic year
- [Google Europe Scholarship for Students with Disabilities](#) (MACS)
- [James Watt Fees Scholarships](#)
All UK/EU applicants
- [James Watt Scholarships](#) (MACS)
All students
- [Leverhulme Trade Charities Trust](#)
Restricted to residents of the UK who are a son, daughter, spouse, widow or widower of a commercial traveller, chemist or grocer.

- [MACS Alumni Scholarship](#) (MACS)
- [Music Scholarships](#)
All students
- [Rapid Formations Entrepreneur Scholarship Programme](#)
All students except exchange program students
- [Remission of Fees \(families of staff\)](#)
Spouses/civil partners and children of members of staff, also retired members of staff of the University
- [Schlumberger Faculty for the Future Fellowships](#)
Women from developing and emerging economies pursuing PhD or Post-Doctorate studies
- [Scotland's Saltire Scholarships](#)
Citizens of Canada, the People's Republic of China, India or USA (2 awards for each country)
- [Sports Scholarships](#)
All students
- [Staff Scholarships](#)
Employees of Heriot-Watt University
- [The Consumer Affairs UK Scholarship Programme](#)
All currently enrolled students
- [West Lothian Educational Trust](#)
Individuals must have originated in West Lothian or have lived there for the last 3 years.