



THE UNIVERSITY  
*of* EDINBURGH

# THE UNIVERSITY OF EDINBURGH

## Informatics

# POSTGRADUATE OPPORTUNITIES

2015 ENTRY

# THE UNIVERSITY OF EDINBURGH: INFLUENCING THE WORLD SINCE 1583

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“You are now in a place where the best courses upon Earth are within your reach . . . such an opportunity you will never again have.”

**Thomas Jefferson, American Founding Father and President** (speaking to his son-in-law, Thomas Mann Randolph, as he began his studies at Edinburgh in 1786)

The University

## Our proud history and alumni ambassadors

For more than 400 years our staff and students have been making their mark on the world. They've explored space, revolutionised surgery, won Nobel Prizes, published era-defining books, run the country, paved the way for life-saving breakthroughs and laid the foundations for solving the mysteries of the universe. By choosing further study or research at Edinburgh you will be joining a community of scholars who have been at the forefront of knowledge since 1583.

We are associated with 16 Nobel Prize winners, including physicists Peter Higgs, Charles Barkla and Max Born, medical researcher Peter Doherty, economist Sir James Mirrlees and biologist Sir Paul Nurse. Our distinguished alumni include NASA astronaut Piers Sellers, former MI5 Director-General Dame Stella Rimington, Olympians Sir Chris Hoy and Katherine Grainger and historical greats such as philosopher David Hume, physicist and mathematician James Clerk Maxwell, inventor Alexander Graham Bell and Sherlock Holmes creator Sir Arthur Conan Doyle.

## Teaching and research excellence

We are consistently ranked as one of the world's top 50 universities. We are 17th in the 2013/14 QS World University Rankings. As host to more than 30,000 students from some 137 countries, studying across 100 academic disciplines, the University of Edinburgh continues to attract the world's greatest minds. World-leading research is produced by 96 per cent\* of our academic departments, placing Edinburgh in the top five in the UK for research. Our excellent teaching was also confirmed in the latest report from the Quality Assurance Agency, which awarded us the highest rating possible for the quality of the student learning experience.

## Collaborations and international partnerships

As an internationally renowned centre of academic excellence, Edinburgh is the site of many world-class research collaborations. Our postgraduate students are crucial to our continued success and development and, along with our staff, they forge research links through regular travel and overseas exchanges. We take pride in our partnerships with other institutions such as the California Institute of Technology, Stanford University, the University of Melbourne, Peking University, the University of Delhi and the University of KwaZulu-Natal – to name but a few.

We are a member of both the League of European Research Universities and the Coimbra Group, giving us strong links with leading European institutions from Barcelona to Berlin.

## Linking research and commerce

Edinburgh was one of the first UK universities to actively develop commercial links with industry, government and the professions. Edinburgh Research and Innovation (ERI) has continued, for the past four decades, to develop the promotion and commercialisation of the University's research excellence. ERI assists our postgraduates in taking a first step to market, whether it is through collaborative research, licensing technology or providing consultancy services.

## Enhancing your career

We're ranked 15th in the world for the employability of our graduates.\*\* With one of the best track records for graduate employment in the Russell Group, we are committed to embedding employability into your teaching and learning experience. From offering access to volunteering schemes to providing support from our sector-leading Careers Service, the University provides myriad opportunities to develop your skills, knowledge and experience giving you the edge in a competitive job market.

## An inspiring destination

Your first-class education will take place in one of Europe's most striking capital cities, a UNESCO World Heritage Site that is regularly voted one of the best places in the world to live. Edinburgh enjoys a solid reputation as a centre for innovation, whether as home to the 18th-century Scottish Enlightenment, as a modern source of pioneering science, medicine and technology, or as the host of the world's largest and longest-established arts festival. You couldn't ask for a more inspiring setting in which to further your knowledge and broaden your horizons.

## Join us

Edinburgh offers unparalleled academic breadth and diversity, making it a vibrant, challenging and stimulating environment for postgraduate study. Whether you plan to change direction, enhance your existing career or develop in-depth knowledge of your area of study, the University of Edinburgh provides a world-class learning experience.

\* Latest Research Assessment Exercise  
\*\* Latest Emerging Global Employability University Rankings

## Facilities and resources

Our exceptional facilities have been built with the needs of innovative learning, teaching and research in mind. We provide comfortable office space and specialist research and teaching labs.

You'll be based at the University's Central Area campus, surrounded by lively venues, leisure facilities and parks and served well by public transport – not to mention the World Heritage attractions of one of the UK's most beautiful capital cities.

The award-winning Informatics Forum is an international research facility for computing and related areas. It houses more than 400 research staff and students, providing office, meeting and social spaces. It also contains several robotics labs, an instrumented multimedia room, eye-tracking and motion capture systems, and a full recording studio amongst other research facilities. Its spectacular atrium plays host to many events, from industry showcases and student hackathons to major research conferences. Neighbouring state-of-the-art teaching facilities include computer and teaching labs with more than 250 machines, 24-hour access to IT facilities for students, and comprehensive support provided by dedicated computing staff.

### An entrepreneurial focus

As well as academic importance, we recognise the commercial potential of our research. In recent years, we've helped to create more spin out companies than any other UK institution (as judged by [spinoutsuk.co.uk](http://spinoutsuk.co.uk)). Among our initiatives is Informatics Ventures, set up in 2008 to support globally ambitious software companies in Scotland and nurture a technology cluster to rival Boston, Pittsburgh, Kyoto and Silicon Valley.

### Creative space

An exciting new venture for our School is our collaboration with Edinburgh College of Art, backed by the Scottish Funding Council. The Centre for Design Informatics allows the integration of product design with ideas from informatics. Designers work alongside informatics entrepreneurs to help build new products and services, including the next generation of social media tools.

### Collections of the University

The University's collections are unique in their depth and diversity. Managed by the Centre for Research Collections, and housed in our Main Library at the heart of our central campus, they span more than 500,000 rare books, scientific and cultural artefacts from around the world, historically significant musical instrument collections, specialist museum collections, and manuscripts.

Highlights include the world's oldest surviving Gaelic text; a page from the final draft of Charles Darwin's *On the Origin of Species*, as well as two copies of the first edition; Adam Smith's original library; Alexander Fleming's sample of mould used to make penicillin; original quartos of Shakespeare plays, with notes in the margins from 16th-century actors; the thermometer of chemist Joseph Black; and original Sir Isaac Newton diagrams in David Gregory manuscripts of 1692.

University archivists – with a broad spectrum of expertise – make it their priority to ensure these items are accessible by our students, researchers and staff.

### First-class teaching

Our taught courses are consistently ranked excellent in external assessments.

# WELCOME TO THE SCHOOL OF INFORMATICS

Informatics is the study of natural and engineered computational systems. It encompasses the academic disciplines of computer science, software engineering, artificial intelligence and cognitive science.

Edinburgh's School of Informatics is the largest academic centre of its kind in Europe and the UK's most successful informatics research institution. Compared with our nearest competitor in the UK, we produce 69 per cent more research judged 'world leading' and we have 44 per cent more research-active staff.

Our size and strength also support unparalleled breadth in our taught courses, which are consistently ranked excellent in external assessments.

By joining our School you will become part of an exciting and vibrant academic culture that will help you to develop the skills and knowledge for a successful career in industry or academia.

### Making an impact

We lead the way in an exciting discipline that is central to a new enlightenment in scholarship and learning. Informatics is critical to the development of science, technology, culture and society. As a postgraduate student you will have the opportunity to make your own mark in the area that most interests and excites you.

### Inspiring people

At the School of Informatics you can join the world's brightest students in learning from our distinguished staff, many of whom are world leaders. Our academics include Fellows of the Royal Society, the Royal Society of Edinburgh and the Royal Academy of Engineering. We boast recent winners of the most prestigious awards in

the field, including the Herbrand Award, the Blaise Pascal Medal and the Yangtze River Scholar award.

### Exciting careers

Graduates from our programmes enjoy career success in a wide array of roles that shape our society, from developing the latest mobile technology to creating intelligent infrastructure. Many go on to work as project managers, researchers, software developers and consultants in the commercial sector (at firms such as Google, Amazon, Skyscanner or Adobe) or take up academic posts, often in Russell Group and Ivy League institutions, such as MIT and Stanford. Some of our graduates have found their own success through start-up companies.

## Community

As a student at the School of Informatics, you'll be studying with the UK's largest group of informatics researchers, comprising almost 500 students and academic staff.

Working in such a large group of researchers and students opens up opportunities for collaboration and creative interaction. The atmosphere is one of community: we encourage students to mix and share their experiences and many of our subject areas invite a multidisciplinary approach. For example, current research in the School includes Human Communication, Digital Curation, Health Informatics, Synthetic and Systems Biology, and Learning Energy Systems.

In 2013 the School received an Athena SWAN Silver Award, which recognises Informatics as a supportive environment for women in the area of Science, Technology, Engineering, Medicine and Mathematics (STEMM).

### Sharing research

In addition to formal teaching, each research institute within the School regularly schedules seminars for all staff and students, where you can hear about cutting-edge research as it unfolds. Research students will also find regular opportunities to present their work in this informal and supportive environment.

### Social networking

Informatics students enjoy a lively social life, and can take part in many student-organised activities. The University's computer society, CompSoc, organises events ranging from games to ice skating and there are regular sports tournaments and tech meet-ups. There is also Hoppers, a social group for women in technology.

The Informatics Forum is a vibrant meeting point for all sorts of groups, from the formal to the very informal – you can even play table tennis in the Forum itself. There are also numerous online resources and meeting points, from the School's Facebook page to wikis and virtual cafes.

### Support

The School's Student Services team offers a first point of contact to all our taught and research students for help and information to support all aspects of your student life, from admissions and funding to graduations and career opportunities.

## Employability and graduate attributes

Computers continue to play a vital role in nearly every aspect of everyday living and in a diverse range of sectors – from the entertainment industry to the environment. Some of the most dynamic and lucrative opportunities are available to those who are skilled in computing, software and information systems.

All our postgraduate students have access to an excellent range of services to help you make the most of your time with us, whether you're looking to enhance your career, pursue research or start your own business.

### Start-up assistance

The School of Informatics is particularly supportive of commercialisation and we have a strong track record in developing spin out companies. For those who are entrepreneurially minded, we provide training and mentoring and host special events to help our students and staff attract venture capital funding for their start-ups. Informatics Ventures is a dedicated knowledge exchange programme, which aims to foster innovation and entrepreneurship through regular workshops, seminars and other events. For more information see: [www.informatics-ventures.com](http://www.informatics-ventures.com)

In addition, the University runs the award-winning programme LAUNCH.ed to help student entrepreneurs start new businesses. Since 2005 LAUNCH.ed has helped Edinburgh students and alumni launch more than 120 businesses, of which more than 85 per cent are still trading.

More information:  
[www.LAUNCH.ed.ac.uk](http://www.LAUNCH.ed.ac.uk)

### Institute for Academic Development

All of our postgraduate students can benefit from the University's Institute for Academic Development (IAD), which provides information, events and courses to develop the skills you will need now and in the future.

For taught postgraduates, the IAD provides a growing range of tailored study-related and transferable skills workshops, plus online advice and learning resources. These are all designed to help you settle into postgraduate life, succeed during your studies, and move confidently to the next stage of your career.

The IAD also offers one of the longest-established university research and career skills training packages in the UK. Our experts will help you gain the skills, knowledge and confidence needed to move on to the next stage in your career, be that in a professional sector or within academia.

The Institute provides research students with dedicated training in topics such as research management; personal effectiveness; communication skills; public engagement, networking and teamworking; leadership; and career management. You can gain expertise in information technology and presentation skills; confidence in undertaking independent and creative research; the ability to critically evaluate source materials; and the capacity to construct intellectually rigorous arguments.

By developing these broader professional skills and qualities, our postgraduate students are always in high demand.

More information:  
[www.ed.ac.uk/iad/postgraduates](http://www.ed.ac.uk/iad/postgraduates)

### Careers Service

The University's award-winning Careers Service aims to expand the horizons of all our students, empowering and inspiring you to make successful career decisions. We work closely with the University's Employability Consultancy to support students to take advantage of every opportunity to enhance your employability while studying.

The Service has a friendly team of experts ready to help you at our offices on the central campus and at King's Buildings. We offer advice and guidance whatever your plans for the future, including careers in research. We offer workshops throughout the year that are open to all postgraduate students, plus sessions specifically for international students.

The Service has a team dedicated to developing our already strong links with employers from all industries and employment sectors; from the world's top recruiters to small enterprises based here in Edinburgh. We provide a programme of opportunities for students to meet employers on campus and virtually and advertise a wide range of part-time and graduate jobs.

More information:  
[www.ed.ac.uk/careers/postgrad](http://www.ed.ac.uk/careers/postgrad)

### Connect.ed

Edinburgh encourages its alumni to stay in touch with current students who are interested in a similar career path. Connect.ed is a networking system run by the Careers Service that provides a confidential opportunity for alumni to share their occupational knowledge and experience with current students, who can contact them for advice and guidance on their future career.

More information:  
[www.ed.ac.uk/careers/connected](http://www.ed.ac.uk/careers/connected)

### Did you know?

The University of Edinburgh is ranked 15th in the world for the employability of its graduates.\*

\*Latest Emerging Global Employability University Rankings

# Taught masters programmes

We offer six taught MSc programmes, each featuring compulsory and optional courses that allow you to tailor your masters degree to your particular interests and career goals.

[www.ed.ac.uk/pg/107](http://www.ed.ac.uk/pg/107)

## Artificial Intelligence

MSc 1 yr FT (3 yrs PT available for UK/EU students)

### Programme description

This MSc is taught at the UK's longest established centre for artificial intelligence, which remains one of the best in the world.

Our research draws on neuroscience, cognitive science, linguistics, computer science, mathematics, statistics and psychology to span knowledge representation and reasoning, the study of brain processes and artificial learning systems, computer vision, mobile and assembly robotics, music perception and visualisation. We aim to give you practical knowledge in the design and construction of intelligent systems so you can apply your skills in a variety of career settings.

### Programme structure

You will follow two taught semesters of lectures, tutorials, project work and written assignments, after which you will learn research methods before individual supervision of your project and dissertation.

### SPECIALIST AREAS

You will choose a 'specialist area' within the programme, which will determine the choice of your optional courses. The specialist areas are intelligent robotics; knowledge management, representation and reasoning; learning from data; natural language processing.

### COMPULSORY COURSES

*Informatics Research Review; Informatics Research Proposal; Introduction to Java Programming* (for students who do not already meet the programming requirements for the taught masters); *Dissertation*.

### OPTION COURSES

You can choose from a variety of optional courses including: *Advanced Vision; Algorithmic Game Theory and Its Applications; Computer Animation and Visualisation; Information Theory; Machine Learning and Pattern Recognition; Natural Language Understanding; Robotics: Science and Systems; Human-Computer Interaction; Software Architecture, Process and Management; Data Mining and Exploration; Text Technologies for Data Science; Computational Cognitive Neuroscience*.

### Career opportunities

Our students are well prepared for both employment and academic research. The emphasis is on practical techniques for the design and construction of intelligent systems, preparing graduates to work in a variety of specialisms, from fraud detection software to spacecraft control.

### Minimum entry requirements

A UK 2:1 degree, or its international equivalent ([www.ed.ac.uk/international/country](http://www.ed.ac.uk/international/country)), in informatics, artificial intelligence, cognitive science, computer science, electrical engineering, linguistics, mathematics, philosophy, physics or psychology, plus experience in computer programming.

### English language requirements

See page 19.

### Fees and funding

[www.ed.ac.uk/student-funding/postgraduate](http://www.ed.ac.uk/student-funding/postgraduate)  
For funding information see also page 16.

### Programme Contact Informatics Teaching Organisation

**Tel** +44 (0)131 650 5194

**Email** [ito@inf.ed.ac.uk](mailto:ito@inf.ed.ac.uk)

## See also...

Some of our taught masters degrees are closely related to those in other Schools. You may be interested in programmes offered by Edinburgh College of Art, or the Schools of Biological Sciences; Mathematics; Philosophy, Psychology & Language Sciences; or Physics & Astronomy.

[www.ed.ac.uk/studying/prospectus-request](http://www.ed.ac.uk/studying/prospectus-request)

[www.ed.ac.uk/pg/108](http://www.ed.ac.uk/pg/108)

## Cognitive Science

MSc 1 yr FT (3 yrs PT available for UK/EU students)

### Programme description

Cognitive Science is a discipline in growing demand, and Edinburgh is a widely recognised leader in this area, with particular strengths in natural language, speech technology, robotics and learning, neural computation and philosophy of the mind.

You will gain a thorough grounding in neural computation, formal logic, computational and theoretical linguistics, cognitive psychology and natural language processing, and through a vast range of optional courses you will develop your own interests in this fascinating field.

### Programme structure

You will follow two taught semesters of lectures, tutorials, project work and written assignments, after which you will learn research methods before individual supervision for your project and dissertation.

### SPECIALIST AREAS

You will choose a 'specialist area' within the programme, which will determine the choice of your option courses. The specialist areas are cognitive science; natural language processing; and neural computation and neuroinformatics.

### COMPULSORY COURSES

*Informatics Research Review; Informatics Research Proposal; Introduction to Java Programming* (for students who do not already meet the programming requirements for the taught masters); *Dissertation*.

### OPTION COURSES

There are more than 50 optional courses to choose from, such as: *Advanced Natural Language Processing; Advanced Vision; Automated Reasoning; Computational Cognitive Neuroscience; Human-Computer Interaction; Machine Learning and Pattern Recognition; Natural Language Generation; Neural Computation; Text Technologies for Data Science; Bioinformatics; Information Theory; Topics in Cognitive Modelling*.

### Career opportunities

This programme will give you a deep understanding of the expanding domain of cognitive science through formal study and experiments. It is perfect preparation for a rewarding academic or professional career. The quality and reputation of the University, the School of Informatics and this programme will enhance your standing with many types of employer.

### Minimum entry requirements

A UK 2:1 degree, or its international equivalent ([www.ed.ac.uk/international/country](http://www.ed.ac.uk/international/country)), in informatics, artificial intelligence, cognitive science, computer science, electrical engineering, linguistics, mathematics, philosophy, physics or psychology, plus experience in computer programming.

### English language requirements

See page 19.

### Fees and funding

[www.ed.ac.uk/student-funding/postgraduate](http://www.ed.ac.uk/student-funding/postgraduate)  
For funding information see also page 16.

### Programme Contact Informatics Teaching Organisation

**Tel** +44 (0)131 650 5194

**Email** [ito@inf.ed.ac.uk](mailto:ito@inf.ed.ac.uk)

[www.ed.ac.uk/pg/110](http://www.ed.ac.uk/pg/110)

## Computer Science

MSc 1 yr FT (3 yrs PT available for UK/EU students)

### Programme description

This MSc will give you specialist knowledge in the design, implementation and use of computing systems ranging from the components of a single processor to computer networks as vast as the internet.

You will gain a solid foundation in theoretical understanding and learn a wide variety of practical techniques that you could use in varied career settings.

### Programme structure

You will follow two taught semesters of lectures, tutorials, project work and written assignments, after which you will learn research methods before individual supervision for your project and dissertation.

### SPECIALIST AREAS

You will choose a 'specialist area' within the programme, which will determine the choice of your optional courses. The specialist areas are analytical and scientific databases; computer systems, software engineering and high performance computing; and theoretical computer science.

### COMPULSORY COURSES

*Informatics Research Review; Informatics Research Proposal; Introduction to Java Programming* (for students who do not already meet the programming requirements for the taught masters); *Dissertation*.

### OPTION COURSES

There are more than 50 optional courses to choose from, such as: *Data Integration and Exchange; Machine Learning and Pattern Recognition; Probabilistic Modelling and Reasoning; Extreme Computing; Bioinformatics; Computer Graphics; Computer Networking; Design and Analysis of Parallel Algorithms; Human-Computer Interaction; Parallel Architectures; Parallel Programming Languages and Systems; Software Architecture, Process and Management; Algorithmic Game Theory and its Applications; Information Theory; Computer Algebra; Computational Complexity; Querying and Storing XML*.

### Career opportunities

Through this programme you will develop specialist, advanced skills in the development, construction and management of advanced computer systems. You will gain practical experience and a thorough theoretical understanding of the field making you attractive to a wide range of employers or preparing you for further academic study.

### Minimum entry requirements

A UK 2:1 degree, or its international equivalent ([www.ed.ac.uk/international/country](http://www.ed.ac.uk/international/country)), in informatics, artificial intelligence, cognitive science, computer science, electrical engineering, linguistics, mathematics, philosophy, physics or psychology, plus experience in computer programming.

### English language requirements

See page 19.

### Fees and funding

[www.ed.ac.uk/student-funding/postgraduate](http://www.ed.ac.uk/student-funding/postgraduate)  
For funding information see also page 16.

### Programme Contact Informatics Teaching Organisation

**Tel** +44 (0)131 650 5194

**Email** [ito@inf.ed.ac.uk](mailto:ito@inf.ed.ac.uk)

[www.ed.ac.uk/pg/803](http://www.ed.ac.uk/pg/803) (Design Informatics)  
[www.ed.ac.uk/pg/802](http://www.ed.ac.uk/pg/802) (Advanced Design Informatics)

## Design Informatics/ Advanced Design Informatics

MSc 1 yr FT (Design Informatics) or  
21 mths FT (Advanced Design Informatics)

### Programme description

Design informatics focuses on designing with data. These programmes are run in conjunction with Edinburgh College of Art through the newly formed Centre for Design Informatics. You will learn how to build computational systems as well as the principles of design thinking and making. Through case studies of real-life products you will apply your knowledge in a practical way, developing an understanding of what it takes to create, design and take a product to market. For more information see:

[www.designinformatics.org](http://www.designinformatics.org)

### Programme structure

**Design Informatics:** You will follow two semesters of taught courses, attending lectures, tutorials and group practicals to acquire the theoretical foundation to enable you to engage in independent research. Between May and August you will do a major individual research project on which you will write a dissertation.

**Advanced Design Informatics:** In the first year, you will follow two semesters of taught courses, attending lectures, tutorials and group practicals to acquire the theoretical foundation to enable you to engage in independent research.

In the summer you have a commercial or public sector placement, where you will work on a project that will help you test and reflect on your knowledge and skills. In the second year, taught courses focus on product design, and you will gain experience in leading a group, before completing a dissertation project.

### COMPULSORY COURSES

*Design for Informatics; Case Studies in Design Informatics 1; Designing with Data; Design Informatics Project; Design Informatics: Histories and Futures; Dissertation;* and, for Advanced Design Informatics, a *Placement*.

### OPTION COURSES

There is a wide choice of options including: *Advanced Natural Language Processing; Computer Graphics; Extreme Computing; Introduction to Vision and Robotics; Text Technologies for Data Science; Advanced Databases; Automatic Speech Recognition; Data Mining and Exploration; Informatics Entrepreneurship and Digital Marketplace.*

### Career opportunities

This degree will put you at the cutting edge of design technology and technology for design, opening up a host of opportunities in the commercial sector.

### Minimum entry requirements

A UK 2:1 degree, or its international equivalent ([www.ed.ac.uk/international/country](http://www.ed.ac.uk/international/country)), in informatics, artificial intelligence, cognitive science, computer science, electrical engineering, linguistics, mathematics, philosophy, physics or psychology, plus experience in computer programming.

### English language requirements

See page 19.

### Fees and funding

[www.ed.ac.uk/student-funding/postgraduate](http://www.ed.ac.uk/student-funding/postgraduate)  
For funding information see also page 16.

**Programme Contact** Informatics Teaching Organisation  
**Tel** +44 (0)131 650 5194  
**Email** [ito@inf.ed.ac.uk](mailto:ito@inf.ed.ac.uk)

[www.ed.ac.uk/pg/111](http://www.ed.ac.uk/pg/111)

## Informatics

MSc 1 yr FT (3 yrs PT available for UK/EU students)

### Programme description

Informatics is the study of how natural and artificial systems store, process and communicate information. Edinburgh has a long-standing tradition of world-class research and teaching in informatics, a discipline central to a new enlightenment in scholarship and learning, and critical to the future development of science, technology and society.

This is our most sought-after taught MSc. We offer a wide choice of courses, spanning established disciplines such as cognitive and computer science as well as emerging areas such as bioinformatics. The programme takes full advantage of our expertise in research and teaching, including specialisms unique to Edinburgh.

### Programme structure

You will follow two taught semesters of lectures, tutorials, project work and written assignments, after which you will learn research methods before individual supervision for your project and dissertation.

### SPECIALIST AREAS

You will choose a 'specialist area' within the programme, which will determine the choice of your optional courses. The specialist areas are analytical and scientific databases; bioinformatics systems and synthetic biology; cognitive science; computer systems, software engineering and high performance computing; intelligent robotics; knowledge management, representation and reasoning; learning from data; natural language processing; neural computation and neuroinformatics; and theoretical computer science.

### COMPULSORY COURSES

*Informatics Research Review; Informatics Research Proposal; Introduction to Java Programming* (for students who do not already meet the programming requirements for the taught masters); *Dissertation*.

### OPTION COURSES

There are 80 option courses available, including courses within specialist areas unique to the programme.

### Career opportunities

Our graduates are well regarded by potential employers worldwide. Many go on to work in the technology industry as software engineers, IT consultants, programmers and developers, and may work with the software and hardware giants that have become household names. Others go on to further study and research.

### Minimum entry requirements

A UK 2:1 degree, or its international equivalent ([www.ed.ac.uk/international/country](http://www.ed.ac.uk/international/country)), in informatics, artificial intelligence, cognitive science, computer science, electrical engineering, linguistics, mathematics, philosophy, physics or psychology, plus experience in computer programming.

### English language requirements

See page 19.

### Fees and funding

[www.ed.ac.uk/student-funding/postgraduate](http://www.ed.ac.uk/student-funding/postgraduate)  
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# Research at the School of Informatics

We have topped the charts for the last two UK Research Assessment Exercises, contributing 10 per cent of the UK's total 'world-leading' research (rated 4\*) in computer science and informatics – placing us far ahead of our nearest competitors. We hope the research you undertake will become part of our future contribution.

The research areas we offer reflect our leadership in the field. Our vast research portfolio is carried out across six institutes: communities of research staff and students with access to specialist facilities and funding. The research degrees we offer follow the same institute grouping, giving you the UK's greatest choice in core and multidisciplinary areas.

## Research options

The most common research degree is the three-year Doctor of Philosophy (PhD) programme. You will embark upon original research under supervision and present the results in a written thesis and oral examination.

The Master of Philosophy (MPhil) requires at least two years of supervised research study. It would usually include taught courses in your first year of study and more independent research in your second year.

The MSc by Research is an opportunity to gain research skills by undertaking independent study related to the School's ongoing research programme, over a period of one year.

## EPSRC Centres for Doctoral Training

The University has recently won a share of a £350 million investment in UK science and engineering postgraduate training by the Engineering and Physical Sciences Research Council (EPSRC).

The School of Informatics hosts two Centres for Doctoral Training, one in Data Science and one in Pervasive Parallelism, and is also a partner in the Centre in Robotics and Autonomous Systems in collaboration with Heriot-Watt University.

These four-year (1+3) programmes combine a training year (MSc by Research) with a three-year PhD. For the latest information, see below and: [www.ed.ac.uk/schools-departments/informatics/postgraduate/cdts/informatics-cdts](http://www.ed.ac.uk/schools-departments/informatics/postgraduate/cdts/informatics-cdts)

## Joint PhD with Beihang University, China

In addition to our Edinburgh-based research degrees, we offer a three-year PhD jointly with Beihang University, China, as part of our internationally collaborative research. Students will be co-supervised by a member of academic staff in each institution, and spend approximately equal time at each location. On this programme you can undertake research in any area of Informatics.

More information:  
[www.ed.ac.uk/pg/805](http://www.ed.ac.uk/pg/805)

**Research excellence**  
We carry out more world-leading research than any other equivalent department in the UK.

# Research opportunities

[www.ed.ac.uk/pg/858](http://www.ed.ac.uk/pg/858)

## Informatics: EPSRC Centre for Doctoral Training in Data Science

1+3 Programme: MSc by Research followed by PhD 4 yrs FT

Large data sets are now generated by almost every activity in science, society and commerce. This EPSRC-sponsored programme tackles the question: how can we efficiently find patterns in these vast streams of data? The applications are limited only by your imagination.

### Research environment

Many research areas in informatics are converging on the problem of data science. Those represented in the School include machine learning, databases, data management, optimization and cluster computing; and also the unstructured data issues generated in areas such as natural language processing and computer vision. Our programme will allow you to specialise and perform advanced research in one of these areas, supervised by one of our 45 world-renowned researchers. Moreover we believe that key research insights can be gained by working across the boundaries of conventional groupings.

### Tangible commercial links

You will benefit from interacting with a group of 35 leading industrial partners, including Amazon, Apple, Google, IBM, and Microsoft. This will ensure your research is informed by real world case studies and will provide a source of diverse internship opportunities.

### Going further

You will be part of a new generation of data scientists, with the technical skills and interdisciplinary awareness to become R&D leaders in this emerging area. Both industry-leading companies and top-tier universities are extremely keen to recruit graduates with these skills.

### English language requirements

See page 19.

### Fees and funding

There are 50 full studentships available for eligible candidates over the next five years.

[www.ed.ac.uk/student-funding/postgraduate](http://www.ed.ac.uk/student-funding/postgraduate)

For funding information see also page 16.

[www.ed.ac.uk/pg/842](http://www.ed.ac.uk/pg/842)

## Informatics: EPSRC Centre for Doctoral Training in Pervasive Parallelism

1+3 Programme: MSc by Research followed by PhD 4 yrs FT

Driven by performance and energy constraints, parallelism is now crucial to all layers of the computing infrastructure, from smartphones to globally distributed systems. This EPSRC-sponsored programme tackles the many urgent interconnected problems raised by parallel systems. How do we design programming languages for such systems? How should the architecture be structured? Which theories, tools and methodologies will allow us to reason about the behaviour of this new hardware and software?

### Research environment

Our supervisors offer internationally leading expertise across all aspects of the pervasive parallelism challenge. These include parallel programming, wireless and mobile networking, reasoning about interaction, models of concurrent computation, energy efficient computing, systems architecture, and performance modelling. You will have access to state-of-the-art facilities from on-chip accelerators including GPGPUs and multicore CPUs to the supercomputer scale systems hosted by the EPCC.

### Tangible commercial links

You will have opportunities to take up three- to six-month internships with leading companies in this area, including ARM, Intel, IBM and Microsoft, and to participate in our industrial engagement programme, exchanging ideas and challenges with our sponsor companies at brainstorming and networking events.

### Going further

We intend for our graduates to become the research leaders, both in academia and industry, whose work will lead the way into the era of mainstream parallelism. This vision is shared by our industrial supporters who have indicated their strong desire to find highly qualified candidates to fill roles in this area. We also have outstanding support for entrepreneurial initiatives through Informatics Ventures.

### English language requirements

See page 19.

### Fees and funding

There are 50 full studentships available for eligible candidates over the next five years.

[www.ed.ac.uk/student-funding/postgraduate](http://www.ed.ac.uk/student-funding/postgraduate)

For funding information see also page 16.

“I decided to study at Edinburgh, not just because of the research facilities offered and the University's prestige as a major educational and scientific development centre, but also because of the great atmosphere in the School of Informatics. Being in an environment that stimulates collaboration and encourages discussion is a great catalyst and a source of inspiration.”

Andreea Radulescu, PhD Artificial Intelligence

## See also...

You may also be interested in research areas offered by other Schools, particularly the School of Biological Sciences; Physics & Astronomy; or Philosophy, Psychology & Language Sciences.

[www.ed.ac.uk/studying/prospectus-request](http://www.ed.ac.uk/studying/prospectus-request)

[www.ed.ac.uk/pg/863](http://www.ed.ac.uk/pg/863)

## Informatics: EPSRC Centre for Doctoral Training in Robotics & Autonomous Systems

1+3 Programme: MSc by Research followed by PhD 4 yrs FT

Robots have the potential to revolutionise society and the economy, working for us, beside us, and interacting with us. This EPSRC-sponsored programme will produce graduates with the technical skills and industry awareness to create an innovation pipeline from academic research to global markets. The University of Edinburgh and Heriot-Watt University are jointly offering this innovative four-year PhD training programme, which combines a strong general grounding in current theory, methods and applications with flexibility for individualised study and a specialised PhD project.

### Research environment

You will have access to the outstanding facilities in the Edinburgh Robotarium, a national facility for research into robot interaction, supporting the research of more than 50 world-leading investigators from 17 cross-disciplinary research groups. These include humanoid movement control, underwater, land and airborne autonomous vehicles, human robot interaction, bio- and neuro-robotics, and planning and decision making in multirobot scenarios.

### Tangible commercial links

Our user partners in industry include companies working in offshore energy, environmental monitoring, defence, assisted living, transport, advanced manufacturing and education. They will provide the real world context for research, as well as opportunities for reciprocal secondments, internships and involvement in our industrial engagement programme.

### Going further

Our aim is to produce innovation-ready graduates who are skilled in the principles of technical and commercial disruption and who understand how finance and organisation realise new products in start-up, SME and corporate situations. They will become leaders in the globally emerging market for autonomous and robotic systems that reduce risk, reduce cost, increase profit and protect the environment.

### English language requirements

See page 19.

### Fees and funding

There are 50 full studentships available for eligible candidates over the next five years.

[www.ed.ac.uk/student-funding/postgraduate](http://www.ed.ac.uk/student-funding/postgraduate)

For funding information see also page 16.

[www.ed.ac.uk/pg/494](http://www.ed.ac.uk/pg/494)

## CISA: Automated Reasoning, Agent Systems, Data Intensive Research, Knowledge Management

PhD 3 yrs FT (6 yrs PT available for UK/EU students)  
MPhil 2 yrs FT (4 yrs PT available for UK/EU students)  
MSc by Research 1 yr FT (2 yrs PT available for UK/EU students)

In this information age, the formalised representation of knowledge and automation of reasoning form the basis of the computerised systems that shape our world. At the Centre for Intelligent Systems and their Applications (CISA), we lead the way in research into this vital field, both in facilities and quality of research.

### Research environment

You'll find a wide range of research areas within CISA, from using abstract logic and theorem-proving methods through to systems-oriented investigations. Our current research groups encompass agents and multi-agent systems, knowledge systems, mathematical reasoning, planning and activity management, and software systems and processes.

Intelligent systems are a driving force for change in areas ranging from reasoning on the web to industrial supply chain management. Aided by our links with commercial and government bodies, the research you'll undertake could shape the future of technology.

### Tangible commercial links

CISA includes one of the most innovative collaborations between research and business – our Artificial Intelligence Applications Institute (AIAI). Through its resources and the engagement of staff and students in consultancy, training and joint projects, we offer solutions to commercial and government clients through the application of newly researched techniques.

### Going further

While your research studies are a perfect route to a career in academia, your degree could also take you into the commercial world of applied intelligent systems. Software developers and the users of automated planning systems are among those who rely on the insights of our research. NASA and animation company Pixar are just two of the organisations that have recently employed our graduates.

### English language requirements

See page 19.

### Fees and funding

[www.ed.ac.uk/student-funding/postgraduate](http://www.ed.ac.uk/student-funding/postgraduate)

For funding information see also page 16.

[www.ed.ac.uk/pg/489](http://www.ed.ac.uk/pg/489)

## IANC: Machine Learning, Computational Neuroscience, Computational Biology

PhD 3 yrs FT (6 yrs PT available for UK/EU students)  
MPhil 2 yrs FT (4 yrs PT available for UK/EU students)  
MSc by Research 1 yr FT (2 yrs PT available for UK/EU students)

The Institute for Adaptive and Neural Computation (IANC) is a world-leading institute dedicated to the theoretical and empirical study of adaptive processes in both artificial and biological systems. We are one of the UK's largest and most prestigious academic teams in these fields. We foster world-class interdisciplinary and collaborative research, bringing together a range of disciplines.

### Research environment

Our research falls into three areas: machine learning, computational neuroscience and computational biology.

In machine learning we develop probabilistic methods that find patterns and structure in data, and apply them to scientific and technological problems. Applications include areas as diverse as astronomy, health sciences and computing. In computational neuroscience and neuroinformatics we study and model how the brain processes information.

The focus in the computational biology area is to develop computational strategies to store, analyse and model a variety of biological data (from protein measurements and genetics to animal and human behavioural data). If you are interested in these areas you should also consider the CDT programme in Data Science (see page 11).

### Career opportunities

The research you'll undertake at IANC is perfectly suited to a career in academia, where you'll be able to use your knowledge to advance this important field. Some graduates take their skills into commercial research posts and find success in creating systems that can be used in everyday applications.

### Specific entry requirements

IANC researchers come from many different academic backgrounds but most of our research requires previous training in mathematics.

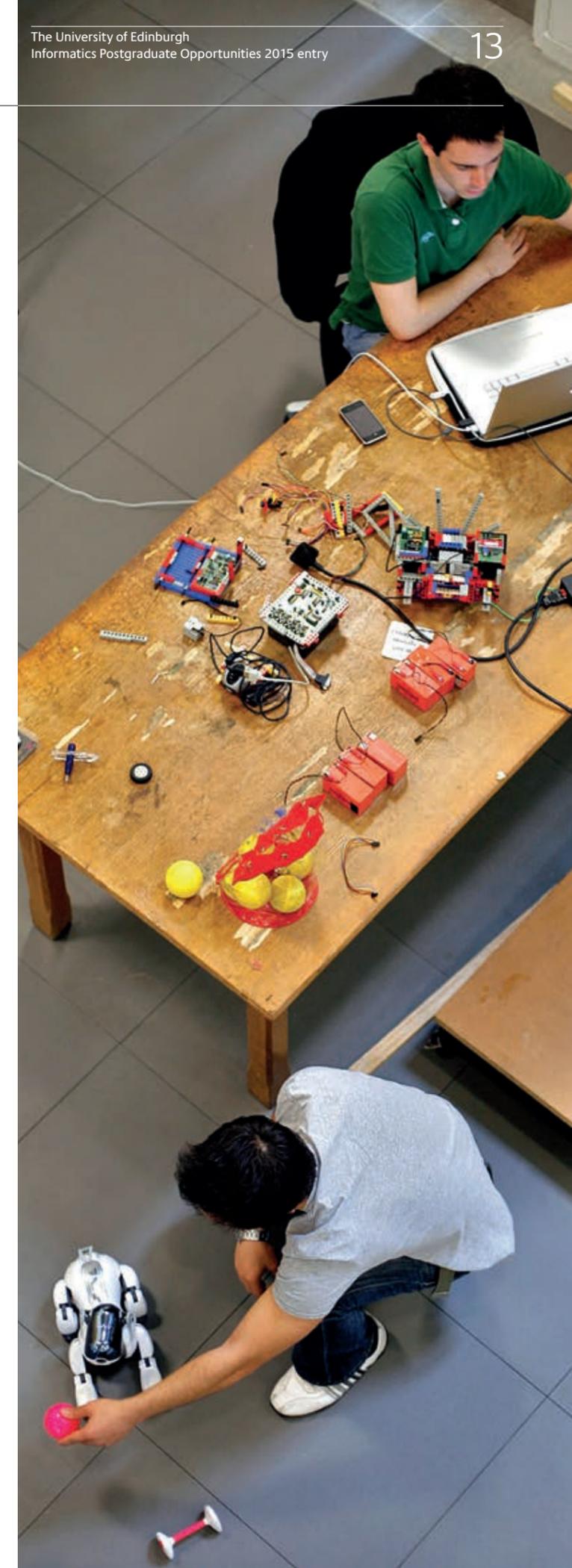
### English language requirements

See page 19.

### Fees and funding

[www.ed.ac.uk/student-funding/postgraduate](http://www.ed.ac.uk/student-funding/postgraduate)

For funding information see also page 16.



[www.ed.ac.uk/pg/492](http://www.ed.ac.uk/pg/492)

## ICSA: Computer Architecture & Systems, Compilation & Systems Software, Computer Networks & Communication

PhD 3 yrs FT (6 yrs PT available for UK/EU students)  
MPhil 2 yrs FT (4 yrs PT available for UK/EU students)  
MSc by Research 1 yr FT (2 yrs PT available for UK/EU students)

The Institute for Computing System Architecture (ICSA) will provide you with academic resources and industry links that are among the best in the world. We're home to the UK's largest group of PhD researchers in the field, and host a Centre of Excellence in partnership with ARM, the world's largest microprocessor intellectual property provider. We're also a member of the European Network of Excellence on High Performance and Embedded Architecture and Compilation.

### Research environment

Our students see their degrees as a launch pad for their careers, and many have established themselves as world-class researchers and developers. By joining their ranks, you'll be able to make your mark on the next generation of technological innovations. Currently, research is focused on the areas of compilers and architectures, parallel computing (see also our CDT programme in Pervasive Parallelism on page 11), wireless networking and processor-automated synthesis by iterative analysis. Our wireless communication group is particularly strong, and currently working on expanding wireless reach within Scotland. While the scope for research is wide, each area is underpinned by our fundamental aims: to extend understanding of existing systems; to improve current systems; and to develop new architecture and engineering methods.

### Encouraging success

You'll be supported in your research by award-winning academic staff – including four Fellows of the Royal Academy of Engineering. They and other research colleagues have contributed to what is an enviable publications portfolio, featuring some of the most prestigious publications in the field. You'll graduate with more than an intensive knowledge of your field: you'll also have established academic and personal links that will last a lifetime.

### Career opportunities

Academic and business employers actively recruit ICSA graduates, many of whom are now designing the next generation of products for major software developers, or taking the lead in other entrepreneurial ventures.

### English language requirements

See page 19.

### Fees and funding

[www.ed.ac.uk/student-funding/postgraduate](http://www.ed.ac.uk/student-funding/postgraduate)  
For funding information see also page 16.

[www.ed.ac.uk/pg/491](http://www.ed.ac.uk/pg/491)

## ILCC: Natural Language Processing, Speech Technology, Information Retrieval & Cognition

PhD 3 yrs FT (6 yrs PT available for UK/EU students)  
MPhil 2 yrs FT (4 yrs PT available for UK/EU students)  
MSc by Research 1 yr FT (2 yrs PT available for UK/EU students)

Strongly interdisciplinary in nature, the Institute for Language, Cognition and Communication (ILCC) is dedicated to both basic and applied research in the computational study of language, communication, and cognition, in both humans and machines. As technology focuses increasingly on language-based communication tools, research into the automation of language processing has become vital. ILCC offers you the broadest research scope in the UK, and a strong computational focus.

### Research environment

Our primary areas of research are: natural language processing and computational linguistics; spoken language processing; dialogue and multimodal interaction; information extraction, retrieval and presentation; computational theories of human cognition; educational and assistive technology.

Much of our research is applied to software development, in areas as diverse as social media, assisted living, gaming and education.

### Cross-disciplinary culture

You may find yourself working closely with other departments of the University, particularly the School of Philosophy, Psychology & Language Sciences. Many of our researchers are involved in two cross-disciplinary research centres: the Human Communication Research Centre and the Centre for Speech Technology Research.

### Career opportunities

While many of our graduates pursue an academic career, others find their skills are highly sought after in the technology industry. A number of our students serve internships with large UK and international software developers, while others take up positions with major social media companies.

### English language requirements

See page 19.

### Fees and funding

[www.ed.ac.uk/student-funding/postgraduate](http://www.ed.ac.uk/student-funding/postgraduate)  
For funding information see also page 16.

[www.ed.ac.uk/pg/495](http://www.ed.ac.uk/pg/495)

## IPAB: Robotics, Computer Vision, Computer Graphics & Animation

PhD 3 yrs FT (6 yrs PT available for UK/EU students)  
MPhil 2 yrs FT (4 yrs PT available for UK/EU students)  
MSc by Research 1 yr FT (2 yrs PT available for UK/EU students)

Supported by the dynamic research culture in the Institute for Perception, Action and Behaviour (IPAB), you can explore robots that learn their own motor control, mimic animal behaviours, or produce autonomous and coordinated team actions. Or you can work with systems that interpret real images and video, or generate complex behaviour in animated characters. We aim to link strong theoretical perspectives with practical hands-on construction, and provide the hardware and software support to realise this vision.

### Excellent facilities

Our two large robotics labs contain a range of mobile platforms, humanoid robots and custom-built actuation systems that attract continuous interest from funders, industry and members of the public. Recent developments include the application of robotic hardware to prosthetics and assisted living, and a team that competes in the international robot soccer league. Our new Edinburgh Alliance for Robotics and Autonomous Systems (EDU-RAS) brings collaboration with Heriot-Watt University to expand the range of facilities and applications we can explore, and to fund research training. The machine vision lab has facilities for 3D range data capture, motion capture and high-resolution and high-speed video, and the high performance computing needed for graphics is well supported, including hardware partnerships with companies such as NVIDIA.

### Career opportunities

While many of our graduates go on to highly successful academic careers, others find their niche in commercial research labs, putting their knowledge and skills to use in an industry setting. Several of our recent graduates have set up or joined spin-out robotics companies. Our graphics researchers have strong connections to the media and games industries.

### Specific entry requirements

We would expect most of our entrants to have a degree in a computing or engineering field, with strong programming skills.

### English language requirements

See page 19.

### Fees and funding

[www.ed.ac.uk/student-funding/postgraduate](http://www.ed.ac.uk/student-funding/postgraduate)  
For funding information see also page 16.

[www.ed.ac.uk/pg/493](http://www.ed.ac.uk/pg/493)

## LFCS: Foundations of Computer Science, Databases, Software & Systems Modelling

PhD 3 yrs FT (6 yrs PT available for UK/EU students)  
MPhil 2 yrs FT (4 yrs PT available for UK/EU students)  
MSc by Research 1 yr FT (2 yrs PT available for UK/EU students)

Established 25 years ago, the Laboratory for Foundations of Computer Science (LFCS) continues to lead the way in the development of mathematical models, theories and tools that probe the possibilities of computation and communication. Our students benefit from being part of one of the largest and strongest groups of theoretical computer scientists in the world.

### Research environment

Our research is aimed at establishing deep understanding of computation in its many forms. Using advanced mathematical principles, we create theories and software tools allowing fundamental capabilities of computation to be explored, as well as designing languages that can be used to construct safe and effective programs. Areas of interest within LFCS include verification, semantics, concurrency, process algebra, algorithms, logic and complexity.

While the results of our research can be applied to any one of a large number of diverse fields, biological modelling is of particular interest. Advances in experimental techniques mean that cell biologists need innovative tools and software to understand the vast quantities of data that are being generated. Other areas where our research is applied include computer security, database systems, software analysis, programming language design and performance analysis.

### Culture of achievement

As a research student at LFCS, you'll have access to our highly respected academic staff community, which includes two Fellows of the Royal Society and a recent winner of a Blaise Pascal Medal. Our students regularly receive 'best paper' awards at conferences.

### Career opportunities

Our graduates are in high demand for postdoctoral academic roles. In addition, the skills you'll graduate with can be applied to roles in industry, particularly finance, software development and consultancy.

### Specific entry requirements

We would expect you to have a strong background in mathematics, in addition to a good degree in a relevant area.

### English language requirements

See page 19.

### Fees and funding

[www.ed.ac.uk/student-funding/postgraduate](http://www.ed.ac.uk/student-funding/postgraduate)  
For funding information see also page 16.

“I knew I wanted to do a PhD in robotics and was very happy to find that Edinburgh had a group specialising in this research, which I subsequently joined. The School of Informatics was truly inspiring and I quickly understood why it had such a renowned reputation.”

**Mike Mangan**, PhD Robotics graduate 2011

# Funding

A large number of scholarships, loans and other funding schemes are available for your postgraduate studies. It is only possible to show a small selection in print. To see the full range, please visit: [www.ed.ac.uk/student-funding/postgraduate](http://www.ed.ac.uk/student-funding/postgraduate).

Awards are offered by the School of Informatics, the College of Science & Engineering, the University of Edinburgh, the Scottish, UK and international governments and many funding bodies.

Here we list a selection of potential sources of financial support for postgraduate students applying to the School of Informatics.

## Tuition fee discounts

We offer a 10 per cent discount on postgraduate fees for all alumni who have graduated with an undergraduate degree from the University. We also offer a 10 per cent discount for international graduates who spent at least one semester at the University of Edinburgh as a visiting undergraduate: [www.ed.ac.uk/student-funding/discounts](http://www.ed.ac.uk/student-funding/discounts)

### Key

- Taught masters programmes
- Masters by Research programmes
- Research programmes

## Loans available for study at the University of Edinburgh

The University of Edinburgh is a participating institution in the following loans programmes, meaning we certify your student status and can help with the application process.

### • The Canada Student Loans Program ●●●

The University is eligible to certify Canadian student loan applications: [www.ed.ac.uk/student-funding/canadian-loans](http://www.ed.ac.uk/student-funding/canadian-loans)

### • The Student Awards Agency for Scotland ●●

The Student Awards Agency for Scotland offers eligible students postgraduate tuition fee loans for eligible programmes: [www.ed.ac.uk/student-funding/pg-loan](http://www.ed.ac.uk/student-funding/pg-loan)

### • US Student Loans ●●●

The University is eligible to certify loan applications for US loan students. Full details on eligibility and how to apply can be found online: [www.ed.ac.uk/student-funding/us-loans](http://www.ed.ac.uk/student-funding/us-loans)

## Research council awards

Research councils offer awards to masters, MPhil and PhD students in most of the Schools within the University of Edinburgh. All studentship applications to the research councils must be made through the University, through your School or College office. Awards can be made for both taught and research programmes.

Normally only those UK/EU students who have been resident in the UK for the preceding three years are eligible for a full award. For some awards, candidates who are EU nationals and are resident in the UK may be eligible for a fees-only award. [www.ed.ac.uk/student-funding/research-councils](http://www.ed.ac.uk/student-funding/research-councils)

## University of Edinburgh scholarships

### • China Scholarships Council/University of Edinburgh Scholarships (China) ●●

A number of scholarships for PhD study for candidates who are citizens and residents of China: [www.ed.ac.uk/student-funding/china-council](http://www.ed.ac.uk/student-funding/china-council)

### • Colciencias Scholarships (Colombia) ●●

The University of Edinburgh offers a number of tuition fee scholarships to full-time PhD students in partnership with Colombia's Department of Science, Technology and Innovation: [www.colciencias.gov.co](http://www.colciencias.gov.co)

### • CONACYT Scholarships (Mexico) ●●●

The University of Edinburgh offers scholarships to full-time postgraduate students in partnership with Mexico's National Council of Science and Technology: [www.conacyt.mx](http://www.conacyt.mx)

### • CONICYT Scholarships (Chile) ●●●

The University of Edinburgh offers scholarships to full-time postgraduate students in partnership with Chile's National Commission for Scientific and Technological Research: [www.conicyt.cl](http://www.conicyt.cl)

### • Edinburgh Global Masters Scholarships ●●

A number of scholarships are available to international students for masters study: [www.ed.ac.uk/student-funding/masters](http://www.ed.ac.uk/student-funding/masters)

### • Edinburgh Global Research Scholarships ●●

These scholarships are designed to attract high-quality international research students to the University: [www.ed.ac.uk/student-funding/global-research](http://www.ed.ac.uk/student-funding/global-research)

### • Eric Liddell China Saltire Scholarships (China) ●●

Ten scholarships are available to Chinese citizens who are permanent residents of mainland China who are accepted on a full-time masters degree programme: [www.ed.ac.uk/student-funding/liddell](http://www.ed.ac.uk/student-funding/liddell)

### • FIDERH and FUNED Scholarships (Mexico) ●●●

The University of Edinburgh offers scholarships in partnership with Mexico's Fund for Development of Human Resources and the Mexican Foundation for Education, Science and Technology: [www.fiderh.org.mx](http://www.fiderh.org.mx) [www.funedx.org](http://www.funedx.org)

### • Google European Doctoral Fellowship ●●

The Graduate School of Informatics can nominate two candidates for this international competition: [http://research.google.com/university/relations/doctoral\\_fellowships\\_europe.html](http://research.google.com/university/relations/doctoral_fellowships_europe.html)

### • Julius Nyerere Masters Scholarships (Tanzania) ●●

One scholarship is available to citizens of Tanzania who are normally resident in Tanzania who are accepted on a full-time masters degree programme: [www.ed.ac.uk/student-funding/nyerere](http://www.ed.ac.uk/student-funding/nyerere)

### • Microsoft Research European PhD Scholarships ●●

Microsoft Research runs an international competition for these scholarships. Around 20 are available to students from Europe, the Middle East and Africa: <http://research.microsoft.com/en-us/collaboration/global/apply-europe.aspx>

### • Principal's Career Development PhD Scholarships ●●

A number of scholarships, open to UK, EU and international PhD students: [www.ed.ac.uk/student-funding/development](http://www.ed.ac.uk/student-funding/development)

### • Principal's Indian Masters Scholarships (India) ●●

A number of scholarships are available to students from India for masters study: [www.ed.ac.uk/student-funding/masters-india](http://www.ed.ac.uk/student-funding/masters-india)

### • School of Informatics Masters Scholarships ●●

Up to 20 scholarships are available for masters study to students who are accepted for admission on a full-time eligible programme: [www.ed.ac.uk/schools-departments/informatics/postgraduate/fees/mcscholarship](http://www.ed.ac.uk/schools-departments/informatics/postgraduate/fees/mcscholarship)

### • School of Informatics Scholarships ●●●

Around 40 research scholarships are available each year to postgraduate research students: [www.ed.ac.uk/schools-departments/informatics/postgraduate/fees](http://www.ed.ac.uk/schools-departments/informatics/postgraduate/fees)

### • Southern African Scholarships ●●●

One award for masters study and one for PhD study available to students from selected southern African countries: [www.ed.ac.uk/student-funding/postgraduate/southern-africa](http://www.ed.ac.uk/student-funding/postgraduate/southern-africa)

### • UK/EU Masters Scholarships ●●

A number of scholarships for UK and EU students who have been accepted on a full-time masters degree programme: [www.ed.ac.uk/student-funding/uk-masters](http://www.ed.ac.uk/student-funding/uk-masters)

## Other sources of funding

The following are examples of the many scholarships and support schemes available to students from particular countries who meet certain eligibility criteria.

### • Beit Trust ●●●

Beit Trust Scholarships support postgraduate students from Malawi, Zambia and Zimbabwe, usually to undertake a masters degree: [www.beittrust.org.uk](http://www.beittrust.org.uk)

### • Chevening Scholarships ●●

A number of partial and full funding scholarships are available to one-year masters students: [www.chevening.org](http://www.chevening.org)

### • Commonwealth Scholarships ●●●

Scholarships available to students who are resident in any Commonwealth country, other than the UK: [www.dfid.gov.uk/cscuk](http://www.dfid.gov.uk/cscuk)

### • Fulbright Scholarships (USA) ●●●

Scholarships open to US graduate students in any subject wishing to study in the UK: [www.iie.org/fulbright](http://www.iie.org/fulbright)

### • Marshall Scholarships (USA) ●●●

Scholarships available to outstanding US students wishing to study at any UK university for at least two years: [www.marshallscholarship.org](http://www.marshallscholarship.org)

### • Scotland's Saltire Scholarships ●●

A number of scholarships open to students who are citizens permanently and ordinarily resident in Canada, China, India and the USA for one year of masters study: [www.ed.ac.uk/student-funding/saltire](http://www.ed.ac.uk/student-funding/saltire)

### • Silber Bequest ●●●

Funding is available to help prospective postgraduate students living in the UK who have been granted refugee status: [www.ed.ac.uk/student-funding/silber](http://www.ed.ac.uk/student-funding/silber)



“The Scottish Government’s initiative to attract international students from Canada, China, India and the US through the Saltire Scholarship Scheme, as well as the University of Edinburgh’s help and support for international students, has helped provide me with an opportunity that I would never have conceived of prior to starting my studies at Edinburgh.”

Robert Starr, MSc High Performance Computing, Scotland's Saltire Scholarship

## How to apply

We have an online application process for all postgraduate programmes. It's a straightforward system with full instructions, including details of any supporting documentation you need to submit.

When applying, you will set up an account, which lets you save your application and continue at another time.

Full guidance on our application system is available at: [www.ed.ac.uk/postgraduate/applying](http://www.ed.ac.uk/postgraduate/applying)

### General requirements

Our usual entrance requirement for postgraduate study is a UK 2:1 degree, or its international equivalent ([www.ed.ac.uk/international/country](http://www.ed.ac.uk/international/country)). This will typically be in an area of Informatics, such as artificial intelligence, cognitive science or computer science. You may also be considered if your degree is in one of the following areas: engineering, linguistics, mathematics, philosophy, physics or psychology. You will need to have experience in computer programming.

You will need to meet the University's language requirements (see right).

Entry requirements for individual programmes can vary, so check the details for the specific programme you wish to apply for.

### References

For applications to taught programmes, the normal requirement is one reference, although an additional reference may be requested in individual cases. For applications to research programmes, two references are required. You should check the entry online for exact requirements for your intended programme of study. For general guidance on references, visit: [www.ed.ac.uk/postgraduate/references](http://www.ed.ac.uk/postgraduate/references)

### Taught MSc programmes

#### Deadlines

Some programmes have application deadlines. Please check the programme entry online for details. For all other programmes, you are encouraged to apply no later than one month prior to entry to ensure there is sufficient time to process your application. However, earlier application is recommended, particularly where there is a high demand for places or when a visa will be required. Should you wish to submit a late application, please contact us for guidance. If you are applying for funding, in most cases you will need an offer to study with us before you can make your funding application.

#### Application procedure

- Thoroughly explore this prospectus and our website to identify your preferred programme of study.
- Check you meet all entry requirements. Check whether a separate application is needed for funding. Check any deadlines.
- Visit [www.ed.ac.uk/pg/degrees](http://www.ed.ac.uk/pg/degrees), navigate to your chosen programme, and click on Apply. Follow the instructions within the online application system, including details of documentation you must supply.
- We are happy to talk to you if you would like more information before applying (see page 19 for contact details) or you can visit: [www.ed.ac.uk/informatics/postgraduate/msc](http://www.ed.ac.uk/informatics/postgraduate/msc)

### Research programmes

#### Deadlines

Our admissions process for research students is organised into two rounds, which are aligned with the timing of the main funding decisions.

For full consideration for all PhD scholarships, including those available to international and EU students, you should apply for admission by mid-December. The second deadline is the end of March, connected to funding decisions mostly affecting UK students.

It is possible for admissions decisions to be made at other times of the year, especially if you have your own or external sources of funding.

Please check the latest deadline information on our website, along with other key dates in the application process.

#### Application procedure

- Thoroughly explore this prospectus and our website to identify your preferred research area.
- In order to increase your chances of a successful application, you are encouraged to identify the most appropriate supervisor for the topics that interest you, and contact that person to discuss your options. Details of our research areas and potential supervisors can be found at: [www.ed.ac.uk/informatics/research](http://www.ed.ac.uk/informatics/research)
- Check you meet all entry requirements. Check any deadlines.
- Go to our online degree finder, navigate to your chosen programme, and click on Apply. Follow the instructions within the online application system, including details of documentation you must supply. Degree finder: [www.ed.ac.uk/postgraduate/degrees](http://www.ed.ac.uk/postgraduate/degrees)
- You will be asked to submit a research proposal. Guidelines can be found at: [www.ed.ac.uk/schools-departments/informatics/postgraduate/faq/questionsapply](http://www.ed.ac.uk/schools-departments/informatics/postgraduate/faq/questionsapply)

### Joining us from overseas

International applicants are advised to check the University's website to find out more about their visa options and our Integrated English for Academic Purposes (IEAP) programme. More information: [www.ed.ac.uk/international/ieap](http://www.ed.ac.uk/international/ieap)

### International agents

The University has certified representative agents in the following locations: Brunei, Canada, China, Gulf Region, Hong Kong, India, Japan, Jordan, Korea, Malaysia, Mexico, Nigeria, Norway, Russia, Saudi Arabia, Singapore, South Africa, South Korea, Taiwan, Thailand, Turkey, Zambia and Zimbabwe. International applicants can use an agent to help guide them through the application process if necessary. For more information visit: [www.ed.ac.uk/studying/international/agents](http://www.ed.ac.uk/studying/international/agents)

### English language requirements

Students whose first language is not English must show evidence of one of the qualifications below:

- IELTS 6.5 (with at least 6.0 in each section).
- TOEFL iBT Total 92 (with at least 20 in each section).
- Cambridge CPE Grade C.
- Cambridge CAE Grade B.

Please note:

- English language requirements can be affected by government policy so please ensure you visit our website for the latest details: [www.ed.ac.uk/english-requirements/pg/cse](http://www.ed.ac.uk/english-requirements/pg/cse)
- Your English language certificate must be no more than two years old at the beginning of your programme.
- A degree from an English-speaking university may be accepted in some circumstances.

Abbreviations: IELTS – International English Language Testing System; TOEFL iBT – Test of English as a Foreign Language Internet-Based Test; CPE – Certificate of Proficiency in English; CAE – Certificate in Advanced English.

[www.ed.ac.uk/english-requirements/pg](http://www.ed.ac.uk/english-requirements/pg)

## Get in touch

### Contact us

Visit: [www.ed.ac.uk/schools-departments/informatics/postgraduate](http://www.ed.ac.uk/schools-departments/informatics/postgraduate)

For more information about taught MSc programmes, please contact the Informatics Teaching Organisation:  
Tel +44 (0)131 650 5194  
Email [ito@inf.ed.ac.uk](mailto:ito@inf.ed.ac.uk)

For more information about our research programmes, including PhD degrees, please contact the School of Informatics Graduate School:

Tel +44 (0)131 650 3091  
Email [phd-admissions@inf.ed.ac.uk](mailto:phd-admissions@inf.ed.ac.uk)

To discuss your research proposal, you'll find details of potential supervisors at: [www.ed.ac.uk/informatics/research/directory](http://www.ed.ac.uk/informatics/research/directory)

### Visit us

Visit our School and explore our facilities online at: [www.ed.ac.uk/schools-departments/informatics/studentservices/visualresources](http://www.ed.ac.uk/schools-departments/informatics/studentservices/visualresources)

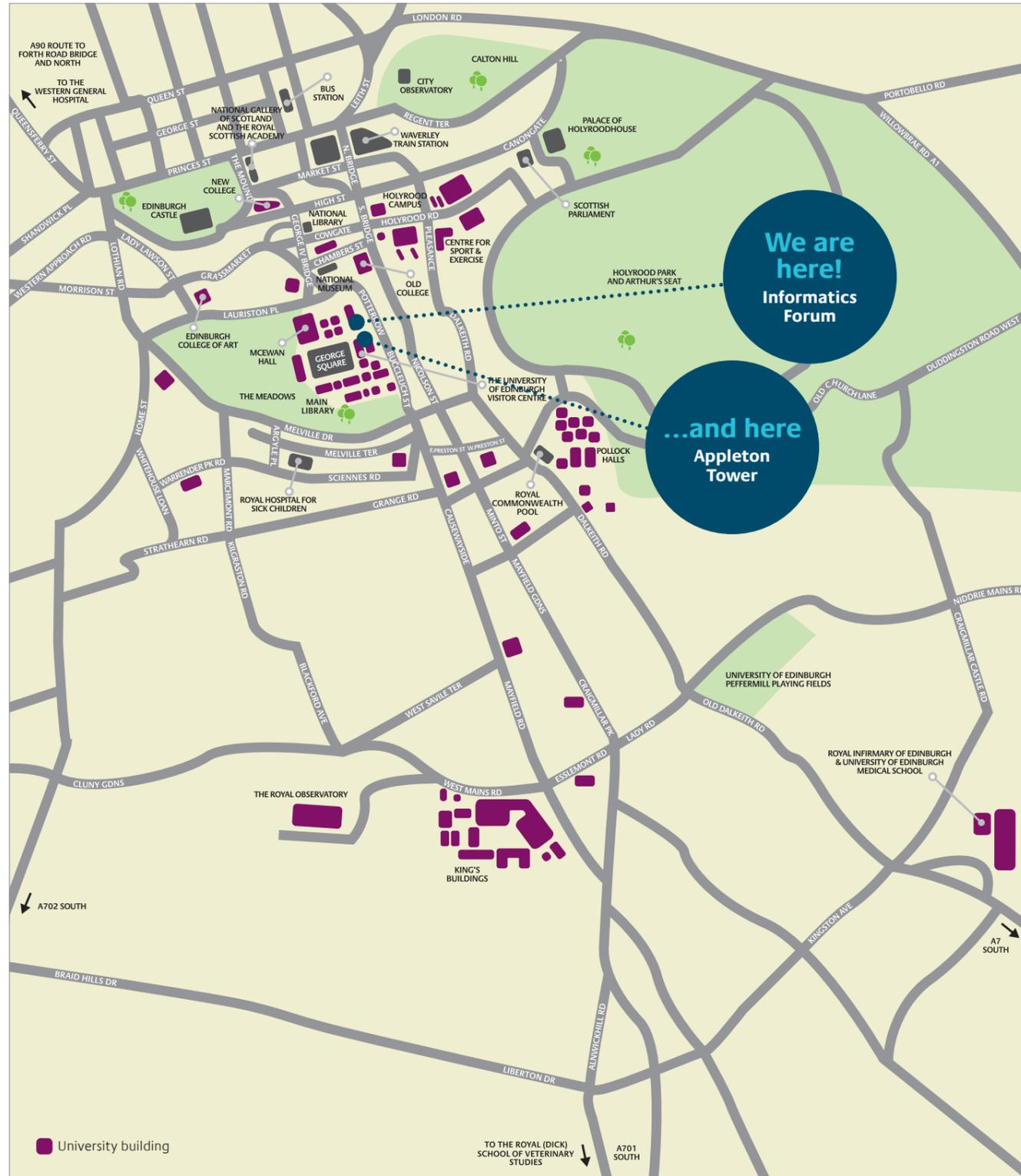
The University's Postgraduate Open Day is your opportunity to come and meet current staff and students. Our next campus-based Open Day takes place on Friday 21 November 2014. For more information, visit: [www.ed.ac.uk/postgraduate-open-day](http://www.ed.ac.uk/postgraduate-open-day)

The University also runs online information sessions for prospective postgraduate students throughout the year. For more information, visit: [www.ed.ac.uk/postgraduate/online-events](http://www.ed.ac.uk/postgraduate/online-events)

# Campus map

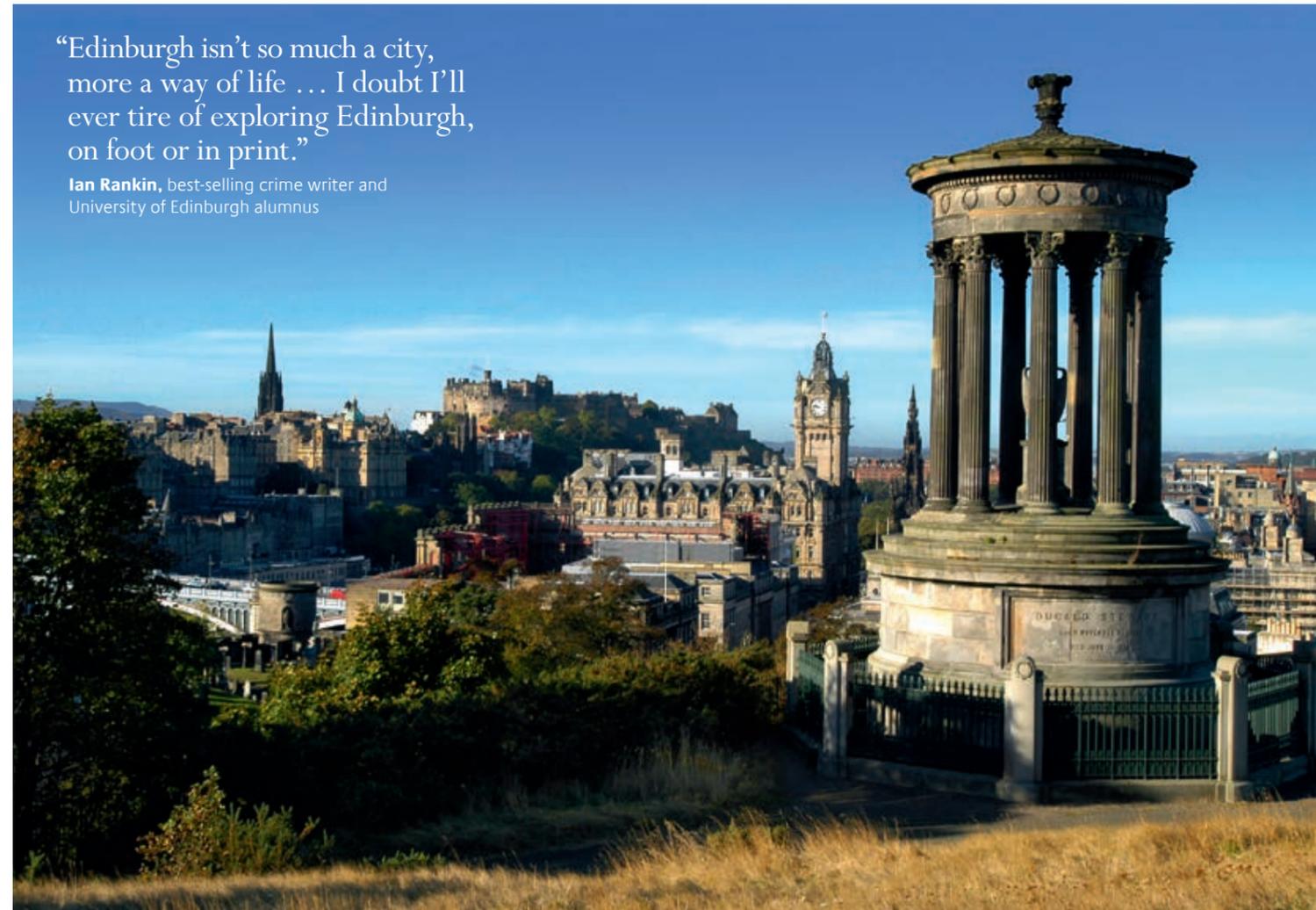
Informatics teaching, learning and research takes place in two buildings based at the University's Central campus, a stone's throw from city attractions and University amenities, such as the Main Library and the Centre for Sport and Exercise.

Detailed maps can be found at: [www.ed.ac.uk/maps](http://www.ed.ac.uk/maps)



“Edinburgh isn’t so much a city, more a way of life ... I doubt I’ll ever tire of exploring Edinburgh, on foot or in print.”

Ian Rankin, best-selling crime writer and University of Edinburgh alumnus



**21 Nov 2014**

**Postgraduate Open Day**

[www.ed.ac.uk/  
postgraduate-open-day](http://www.ed.ac.uk/postgraduate-open-day)

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