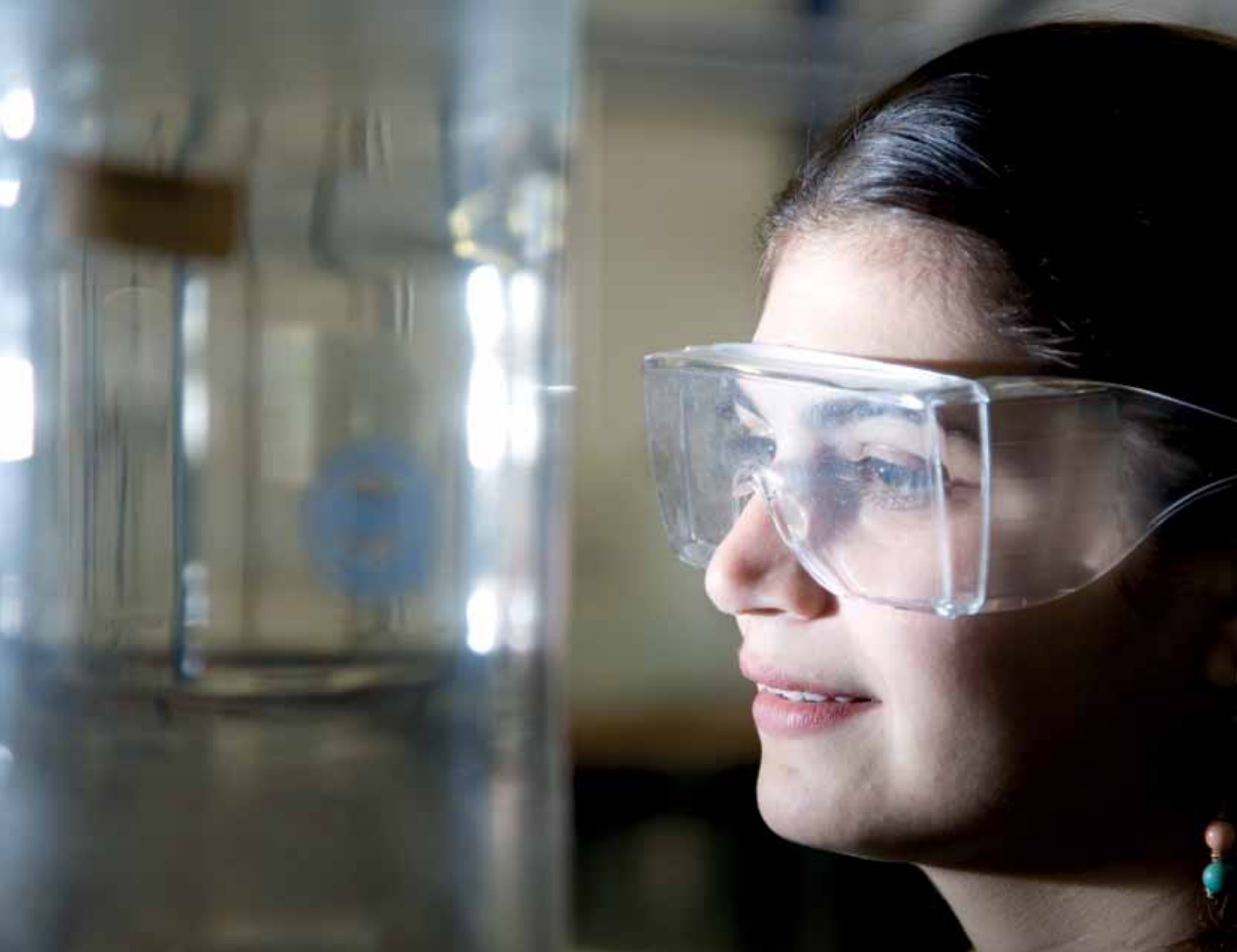




Engineering

Postgraduate opportunities Prospectus 2013 entry

www.ed.ac.uk



THE UNIVERSITY
of EDINBURGH





THE UNIVERSITY *of* EDINBURGH

Welcome to the University of Edinburgh: Influencing the world since 1583

Our proud history and alumni ambassadors

For more than 400 years our people 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 15 Nobel Prize winners, including physicists Charles Barkla and Max Born, medical researcher Peter Doherty, economist Sir James Mirrlees and biologist Sir Paul Nurse. Our famous 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. As host to more than 30,000 students from some 130 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.





“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 in 1786)

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

With the best track record for graduate employment in the Russell Group, the University of Edinburgh is committed to embedding employability into the teaching and learning experience. From offering access to volunteering schemes to providing support from our sector-leading Careers Service, the University gives students myriad opportunities to develop the skills, knowledge and experience to give them 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, which 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 or as a modern source of pioneering science, medicine and technology. 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.

*Times Higher Education World University Rankings ** Research Assessment Exercise 2008



Contents

Welcome to the School of Engineering	2
Facilities and resources	3
Community	4
Employability and graduate attributes	5
Taught masters programmes	6
Research at the School of Engineering	12
Research opportunities	13
Taught professional doctorates	15
Funding	16
How to apply	18
Get in touch	19
Campus map	20



facebook.com/universityofedinburgh



twitter.com/ApplyEdinburgh



youtube.com/edinburghuniversity

Welcome to the School of Engineering

The School of Engineering is a hotbed of innovation. Not only are we ranked third in the latest UK Research Assessment Exercise, but we also have a strong track record in producing technology spin-outs and developing industry links that enable our postgraduate students to build relationships that last a whole career.

We cover the entire field of engineering through our five specialist research institutes.

Materials and processes

The **Institute for Materials and Processes** carries out world-class research into every conceivable kind of material, ranging from fluids and soft matter to hard materials. Its researchers study processes spanning biomedical, mechanical and chemical engineering and its focus ranges from nanosystems and multiphase flows to carbon capture.

Digital communications

The **Institute for Digital Communications** pioneers new theories and techniques in a field that has come to power the global economy. Among recent highlights: Professor Harald Haas's 'Li-fi' system of lightbulb-based wireless communication was named among the world's top inventions by *Time* magazine.

Integrated micro and nano systems

The **Institute for Integrated Micro and Nano Systems**' research encompasses integrated circuit design, system-on-chip design, microfabrication, micro-electro mechanical systems, micro-machining and neural computation. We have a particular focus on bioelectronics, biomechanics and other health-related areas.

Energy systems

The **Institute for Energy Systems** is helping to shape tomorrow's difficult energy decisions. The institute continues a long line of world-leading innovation by Edinburgh researchers, from the 'Duck' wave energy converter invented in the 1970s by Stephen Salter – now Emeritus Professor of Engineering Design – to direct drive electrical generators, wave generation technology and the latest

hydraulic transmission systems. Our research covers machinery, electronics, power distribution, marine energy including offshore wind generation, climate change impact assessment and policy development.

Infrastructure and environment

The **Institute for Infrastructure and Environment** is shaping the development of better technologies to improve the built and natural environments. The Institute hosts the world-leading BRE Centre for Fire Safety Engineering and similarly excellent activities in environmental engineering, bulk materials handling, high-speed rail, non-destructive testing, design, performance, resilience and regulation of structures and systems.



Facilities and resources

From supercomputing to structural testing, the facilities for your postgraduate studies at the School of Engineering are among the best in the world.

We have computing facilities unique to the UK, including EPCC, a leading European centre for research, and the silicon fabrication capabilities of the Scottish Microelectronics Centre (SMC), which also has extensive 'class 10' cleanrooms and provides rare access to tools for processing 200mm silicon wafers. The SMC has strong links with industry and spin-out activity, and generates annual turnover of more than £1 million.

Extensively equipped

The BRE Centre for Fire Safety Engineering hosts bespoke equipment to support groundbreaking research and consultancy with precisely controlled high temperatures and the latest image analysis techniques. The recently refurbished Structures Test Hall is our high-headroom lab for testing large and unusual assemblies. There are state-of-the-art lab facilities for developing and testing NDE and material-handling technologies, a smart infrastructure lab and a good range of environmental engineering testing resources for the water and waste management sectors.

New investment

The £6.5 million Industrial Doctorate Centre in Offshore Renewable Energy is a new facility, led by the University of Edinburgh, that will train 50 engineering doctorate students over nine years in all aspects of Offshore Renewable Energy. The University of Edinburgh's leadership in low-carbon energy has been further enhanced through a £9 million investment in the UK All-Waters Combined Current and Wave Test Facility for wave and tidal devices. Students of biomechanics have access to the best medical imaging facilities in Europe, the Clinical Research Imaging Centre recently opened at Edinburgh's Royal Infirmary through a major collaboration between the University and the National Health Service.

In addition to outstanding University-based resources, postgraduate programmes use visits to external sites and facilities to gain research data and to contextualise learning.



Community

Our graduate community is large and diverse, composed of almost 80 academics and more than 350 postgraduate students representing more than 50 nationalities. Our research spans a wide spectrum of modern engineering and we are equipped with state-of-the-art resources, keeping us at the forefront of our research fields.

The School of Engineering is a partner in a number of interdisciplinary centres within the University, from which postgraduate research students can derive additional expertise. These include:

- The UK Centre for Carbon Capture and Storage
- The Centre for Biomedical Engineering at Edinburgh
- The Centre for Materials Science and Engineering
- The Centre for Science at Extreme Conditions
- The Scottish Mechanotransduction Consortium
- The Edinburgh Materials Microanalysis Centre

In addition, postgraduate students can draw on the unique Edinburgh Research Partnership in Engineering and Mathematics (ERPem), a research consortium involving the University of Edinburgh, Heriot-Watt University and Edinburgh Napier University.

Hall of fame

From telephone inventor Alexander Graham Bell to geologist James Hutton, the University of Edinburgh has produced many leading lights in the field of science and engineering.

By joining our School you will follow in the footsteps of some of engineering's most pioneering individuals. Our staff, students and alumni have a long tradition of making a vital contribution to contemporary living. Inventor of

the cable car Fleeming Jenkin was Professor of Engineering at the University during the 19th century, and William Rankine, a key contributor to the science of thermodynamics, was educated at Edinburgh. In more recent times, the late Sir James Hamilton – one of our graduates – was responsible for the wing design on the world's most famous plane Concorde, Professor Stephen Salter, who is based at the School as an emeritus professor, is widely considered to be a pioneer in the field of wave energy, while Harald Haas, Chair of Mobile Communications, has attracted international interest with his pioneering 'Li-Fi' invention. Our entrepreneurial engineers have also made significant contributions to modern gadgets, such as the iPod and the camera phone.



Employability and graduate attributes

With our excellent employability record and internationally respected reputation, the University of Edinburgh is a reliable choice for developing your engineering career. Whether you are looking to make your mark in industry, consultancy, or academia or develop a business venture of your own, we offer a number of services to help you fulfil your ambitions and make the most of your time here.

Institute of Academic Development

All of our postgraduate students have the opportunity to 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.

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

The Institute provides PhD researchers and masters by research students with dedicated training in topics such as research management; personal effectiveness; communication skills; public engagement, networking and team working; 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.

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 onwards to the next stage of your career.

Developing these broader professional skills and qualities means that our postgraduate students are always in high demand.

For more information please visit www.ed.ac.uk/iad/postgraduates.

Careers Service

The University's award-winning Careers Service aims to expand the horizons of all our students, enabling you to make informed career decisions and progress towards high personal and professional achievement, whether in work or in further study. Our goal is to offer you a world-class service.

Our teams of subject-specific expert advisers are here to help at any time in your programme of study. We offer impartial guidance and information, and draw on our relationships with a wide range of employing and training organisations. For more information on the full range of services available, including access to vacancies, advice on starting your own business, getting published, working internationally or even volunteering, visit the postgraduate section of our website at www.ed.ac.uk/careers.

Research support

We encourage our researchers to gain experience and skills through presenting their research via formal outlets such as journals or conferences throughout the duration of their postgraduate studies. Research students may also have access to courses offered by other organisations such as the Engineering and Physical Sciences Research Council.

Business creation

For students considering starting a business on completion of their studies, LAUNCH.ed provides free commercialisation support for taking the first step to turning your business ideas into reality, and offers guidance in funding options, clinics, one-to-one support and links to people who have already done it. Visit www.launch.ed.ac.uk.



Taught masters programmes

Students following taught Master of Science (MSc) programmes will typically take two semesters of taught courses, followed by a research project for which you will write a dissertation.

BIOELECTRONICS

www.ed.ac.uk/pg/443

MSc 1 yr FT

Programme description

Bioelectronics is the innovative merging of high-tech electronics, physical chemistry and micro/nano technologies, directed towards applications in medicine and the life sciences.

This programme equips you with fundamental knowledge of bioscience and biotechnology, providing advanced training in electronic engineering, microfabrication, biomedical image processing and biosensors.

Programme structure

This programme is run over 12 months, with two semesters of taught courses followed by a research project leading to a masters thesis.

Semester 1 courses

Introduction to Bioelectronics; Analogue IC Design; Analogue VLSI A; Image Processing; Biosensors.

Semester 2 courses

Research Project Preparation; Biosensors and Instrumentation; Microfabrication Techniques; Lab-on-Chip Technologies; Biomedical Imaging Techniques; Technology and Innovation Management.

Career opportunities

Graduates will be prepared to work as engineers or scientists solving problems in the biomedical and biomolecular domains, or to pursue advanced degrees in engineering, medicine or the life sciences.

Minimum entry requirements

A UK 2:1 degree, or its international equivalent (www.ed.ac.uk/international/country), in engineering or a physical science.

English language requirements

See page 18

Tuition fees in 2012/13*

1 yr FT: UK/EU £5,750; international £17,200

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Programme contact

MSc Administrator

T: +44 (0)131 650 7352 **E:** pgtenquiries@eng.ed.ac.uk

BIOELECTRONICS AND BIOSENSORS

www.ed.ac.uk/pg/799

MSc 1 yr FT

Programme description

Bioelectronic and biosensor technology exists at the interface between electronics engineering and the science of bioanalytical chemistry. Understanding of bioelectronics is important for the study of biomolecules, cells and organisms, particularly their electronic/ionic properties and behaviour. The application of this knowledge in the creation of biosensors is currently driving a revolution in biomedicine through the development of advanced diagnostic techniques, which can be used at the point of care.

This MSc aims to provide the next generation of researchers and innovators with the skills and knowledge to succeed in this challenging and fast-moving field. Edinburgh's position at the forefront of research in engineering, chemistry and medicine means that students have access to academics and researchers with state-of-the-art knowledge. Much of this research is of an interdisciplinary nature and so there is a need for researchers and technologists who are able to bridge the gaps between these different disciplines and communicate across boundaries.

Programme structure

This programme is run over 12 months, with two semesters of taught courses followed by a research project leading to a masters thesis.

Semester 1 courses

Introduction to Bioelectronics, plus courses chosen from: *Biosensors; Chemistry for Life Sciences; Introduction to Analogue Electronics; Concepts and Techniques in Bioanalytical Chemistry.*

Semester 2 courses

Biophysical Chemistry; BioSensors and Instrumentation; Lab-on-Chip Technologies; Biomedical Imaging Techniques; Microfabrication Techniques.

Career opportunities

Graduates will be prepared to work as interdisciplinary research engineers or scientists solving problems at the boundary between the physical and the life sciences, or to pursue advanced degrees in a wide range of subjects from engineering to medicine.

Minimum entry requirements

A UK 2:1 degree, or its international equivalent (www.ed.ac.uk/international/country), in engineering, chemistry or another relevant physical science.

English language requirements

See page 18

Tuition fees in 2012/13*

1 yr FT: UK/EU £5,750; international £17,200

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Programme contact

MSc Administrator

T: +44 (0)131 650 7352 **E:** pgtenquiries@eng.ed.ac.uk

BIOMECHANICS

www.ed.ac.uk/pg/670

MSc 1 yr FT

Programme description

Biomechanics is the study of the relationship between forces and function within cells, tissues and organs within living organisms.

This MSc provides you with knowledge in the broad range of fields necessary for the study of biomechanics, practical skills in the form of computational modelling, and training in research methods. Biomechanics areas you will study include the cardiovascular and musculoskeletal systems and tissue engineering. Individual research projects will be application-based using a range of life science and physics/engineering supervisors, allowing you to apply their knowledge and tools to a specific biomechanics area.

Programme structure

This programme is run over 12 months, with two semesters of taught courses followed by a research project leading to a masters thesis. Teaching will be based at the King's Buildings and at the University's Medical School at Little France.

Semester 1 courses

Introduction to Physiology for Biomechanics; Analytical Fluid Mechanics; Computational Fluid Dynamics; Statistics for Biomedical Sciences.

Semester 2 courses

Biomedical Imaging; Finite Element Analysis for Solids; Measurement Methods in Hard/Soft Tissues and Fluids; Research Project Preparation; Biomechanics Cells, Tissues and Organs.

Career opportunities

The programme provides graduates with a broad training sufficient to enable them to undertake future research work in biomechanics. It is also an excellent basis for a career in the biomedical sciences, or to pursue advanced degrees in engineering, medicine or the life sciences.

Minimum entry requirements

A UK 2:1 degree, or its international equivalent (www.ed.ac.uk/international/country), in engineering or physics.

English language requirements

See page 18

Tuition fees in 2012/13*

1 yr FT: UK/EU £5,750; international £17,200

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Programme contact

MSc Administrator

T: +44 (0)131 650 7352 E: pgtenquiries@eng.ed.ac.uk

CARBON CAPTURE & STORAGE (ENGINEERING)

www.ed.ac.uk/pg/518

MSc 1 yr FT

CARBON CAPTURE & STORAGE

www.ed.ac.uk/pg/518

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

Programme description

This is the first MSc in Carbon Capture & Storage (CCS) in the UK. It provides high-level interdisciplinary skills and training in the entire value chain of carbon capture and storage.

The programme incorporates two streams, each targeting students with differing career aims and backgrounds. Both streams draw on our world-class interdisciplinary academic research in carbon capture & storage, including insights gained from collaboration with a broad range of industrial stakeholders.

Programme structure

This programme is run over 12 months, with two semesters of taught courses followed by a research project leading to a masters thesis.

Semester 1 courses

Introduction to Geology; Thermodynamics for Power Plant Engineering with CO₂ Capture; Carbon Capture and Storage Group Design Project (MSc); Carbon Capture and Transport.

Semester 2 courses

Separation Processes for Carbon Capture; Advanced Power Plant Engineering with Carbon Capture; Chemical Engineering Thermodynamics; Geological Carbon Storage, plus courses chosen from Adsorption; Gas Separations Using Membranes; Molecular Thermodynamics; Energy Policy and Politics.

Career opportunities

By completing our unique multidisciplinary programme, graduates develop skills that will help them to become the next generation of leaders who will implement the large-scale decarbonisation of the energy sector.

Minimum entry requirements

A UK 2:1 degree, or its international equivalent (www.ed.ac.uk/international/country), in an engineering or geosciences subject for the Carbon Capture & Storage programme, and in engineering or physical sciences for the Carbon Capture & Storage (Engineering) programme. Evidence of numeracy is also required.

English language requirements

See page 18

Tuition fees in 2012/13*

1 yr FT: UK/EU £5,750; international £17,200

3 yrs PT: UK/EU £1,920 per year

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Programme contact

MSc Administrator

T: +44 (0)131 650 7352 E: pgtenquiries@eng.ed.ac.uk

ELECTRONICS

www.ed.ac.uk/pg/669

MSc 1 yr FT

Programme description

This programme provides graduates with a broad training in electronics. It is suitable for recent graduates who wish to develop the specialist knowledge and skills relevant to this industry and is also suitable for advanced study in preparation for research work in an academic or industrial environment or with a specialist consultancy.

The MSc provides a solid theoretical background in electronics plus practical laboratory experience using analogue systems designed for teaching purposes and advanced state-of-the-art digital systems. In addition, students undertake training in research methods and an individual research project.

Programme structure

This programme is run over 12 months, with two semesters of taught courses followed by a research project leading to a masters thesis.

Semester 1 courses

Analogue IC Design; Analogue VLSI A; Principles of Microelectronic Devices; Discrete-Time Signal Analysis; Power Electronics 4.

Semester 2 courses

Digital System Design; Digital Systems Laboratory; High-Level Programming of Reconfigurable Hardware; Research Project Preparation and either Modern Economic Issues in Industry or Technology and Innovation Management.

Career opportunities

You will gain significant practical experience in both analogue and digital laboratories, and will become familiar with the latest industry-standard design software and environments. You will have been exposed to concepts such as design re-use and systems-on-chip technology, and will be capable of cooperating with others in the field of electronic system design.

Minimum entry requirements

A UK 2:1 degree, or its international equivalent (www.ed.ac.uk/international/country), in electronics or electrical engineering. Any appropriate professional experience will also be considered.

English language requirements

See page 18

Tuition fees in 2012/13*

1 yr FT: UK/EU £5,750; international £17,200.

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Programme contact

MSc Administrator

T: +44 (0)131 650 7352 E: pgtenquiries@eng.ed.ac.uk

ELECTRONICS: ANALOGUE SYSTEM DESIGN

www.ed.ac.uk/pg/447

MSc 1 yr FT

Programme description

Repeated surveys show that there is a worldwide shortage of analogue engineers, and this degree programme aims to help fill this gap. It equips graduates with a broad training in analogue design, particularly using integrated circuits. It provides a solid theoretical foundation, plus practical laboratory experience, using analogue systems designed for teaching purposes. It also covers simulation and CAD, as well as advanced topics at the cutting edge of research. Your independent research project will involve innovative analogue chip or system design.

Programme structure

This programme is run over 12 months, with two semesters of taught courses followed by a research project leading to a masters thesis.

Semester 1 courses

Analogue IC Design; Analogue VLSI A; Principles of Microelectronic Devices; Discrete-Time Signal Analysis; Power Electronics.

Semester 2 courses

Analogue VLSI B; Analogue Circuit Design; Sigma Delta Conversion; Research Project Preparation; Microfabrication Techniques.

Career opportunities

The programme will appeal to graduates who wish to pursue a career in analogue circuit and system design, or who wish to work supporting digital communications or systems engineers. It is also suitable as preparation for research work in an academic or industrial environment.

Minimum entry requirements

A UK 2:1 degree, or its international equivalent (www.ed.ac.uk/international/country), in electrical or electronic engineering.

English language requirements

See page 18

Tuition fees in 2012/13*

1 yr FT: UK/EU £5,750; international £17,200.

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Programme contact

MSc Administrator

T: +44 (0)131 650 7352 E: pgtenquiries@eng.ed.ac.uk

INTERNATIONAL MASTERS IN FIRE SAFETY ENGINEERING

www.imfse.ugent.be

MSc 2 yrs FT

Programme description

This programme is a two-year degree in the Erasmus Mundus framework. The degree is coordinated by Ghent University, Belgium, in partnership with the University of Lund, Sweden, and the University of Edinburgh.

Classes in Edinburgh focus on structural engineering in the context of fire safety engineering. Classes in Ghent have a more general fire safety engineering focus, and classes in Lund place emphasis on enclosure fire dynamics, risk analysis and human behaviour.

Programme structure

The programme consists of four semesters each worth 30 European Credit Transfer and Accumulation System (ECTS) credits. The mobility structure, with a change in study location after each semester, gives students the opportunity to gain from the expertise of each university.

Semester 1

Students choose to study either at Ghent or Edinburgh.

Ghent University: *Introduction to Fire Dynamics; Basics of Structural Engineering; Thermodynamics, Heat and Mass Transfer; Language and Culture* (this course is given two weeks before the start of the academic year).

University of Edinburgh: *Fire Science and Fire Dynamics; Structural Form, Function and Design Philosophy; Finite Element Method and Implementation; Engineering Project Management*.

Semester 2

Lund University: *Risk Assessment; Advanced Fire Dynamics; Human Behaviour in Fire; Simulation of Fires in Enclosures*.

Semester 3

Students choose to study either at Ghent or Edinburgh.

Ghent University: *Explosions and Industrial Fire Safety; Passive Fire Protection; Active Fire Protection I: Detection and Suppression; Active Fire Protection II: Smoke and Heat Control; Fire Safety Regulation; Performance-Based Design*.

University of Edinburgh: *Real Structural Behaviour or Structural Dynamics and Earthquake Engineering* (taught alternate years); *Quantitative Methods in Fire Safety Engineering; Current Methods in Fire Safety Engineering; Fire Dynamics Laboratory; Fire Resistance of Structures*.

Semester 4

The masters thesis is supervised by at least one of the partner universities.

Career opportunities

We are aiming to train the next generation of leaders in this field; there is currently great demand for fire safety engineering graduates worldwide.

Minimum entry requirements

A UK undergraduate degree, or its international equivalent (www.ed.ac.uk/international/country), in civil, structural, mechanical, electrical, chemical or industrial engineering; material sciences; chemistry; physics; applied physics; architecture; urbanism and spatial planning or a related discipline.

English language requirements

See page 18

Tuition fees in 2012/13*

2 yrs FT: UK/EU €6,000 per year; international €8,000 per year

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Programme contact

E: IMFSE@UGent.be



SIGNAL PROCESSING & COMMUNICATIONS

www.ed.ac.uk/pg/20

MSc 1 yr FT (2 yrs PT available for UK/EU students)

Programme description

This programme provides graduates and working professionals with a broad training in signal processing and communications. It is suitable for recent graduates who wish to develop the specialist knowledge and skills relevant to this industry and is also suitable as advanced study in preparation for research work in an academic or industrial environment or in a specialist consultancy organisation.

Engineers or other professionals wishing to participate in the MSc programme may do so on a part-time basis.

Programme structure

This programme is run over 12 months, with two semesters of taught courses followed by a research project leading to a masters thesis.

Semester 1 courses

Discrete-Time Signal Analysis; Digital Communication Fundamentals; Statistical Signal Processing; Image Processing; Signal Processing Laboratory.

Semester 2 courses

Adaptive Signal Processing; Advanced Digital Communications; Array Processing Methods; Advanced Concepts in Signal Processing; Phase 1 project.

Career opportunities

This programme will appeal to graduates who wish to pursue a career in a range of industries such as communications, radar, medical imaging and wherever signal processing is applied.

Minimum entry requirements

A UK 2:1 degree, or its international equivalent (www.ed.ac.uk/international/country), typically in electrical engineering with a specialisation in signal processing and/or communications. Applications from related fields such as computer science, physics or mathematics will also be considered. Entry into this high-level programme is competitive and high grades are expected in fundamentals such as mathematics, signals and systems, probability and statistics and communications and signal processing.

English language requirements

See page 18

Tuition fees in 2012/13*

1 yr FT: UK/EU £5,750; international £17,200

2 yrs PT: UK/EU £2,875 per year

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Programme contact

MSc Administrator

T: +44 (0)131 650 7352 E: pgtenquiries@eng.ed.ac.uk



www.facebook.com/uoe.msccspc

STRUCTURAL & FIRE SAFETY ENGINEERING

www.ed.ac.uk/pg/423

MSc 1 yr FT

Programme description

This programme covers the fundamentals of fire science, including laboratory classes, fire safety engineering and relevant structural engineering topics, such as finite element methods. You will choose your own research project from an extensive range of options and this will run in parallel with teaching, culminating in the dissertation.

You will gain knowledge of the critical issues in structural fire safety engineering and an understanding of relevant fire and structural behaviours. You will become familiar with performance-based approaches to design and have an awareness of the capabilities – and limitations – of relevant advanced modelling methods for structures and fire.

Programme structure

This programme is run over 12 months, with two semesters of taught courses followed by a research project leading to a masters thesis.

Compulsory courses

Fire Science and Fire Dynamics; The Finite Element Method and Implementation; Quantitative Methods in Fire Safety Engineering; Fire Resistance of Structures; Fire Dynamics Laboratory; Plastic Analysis of Frames and Slabs; Thin-Walled Members and Stability; Mechanics of Repairing and Strengthening Structures; Mechanics of Repair and Strengthening of structure.

Career opportunities

Internationally, there is great demand for graduates in this field, with expertise in structural fire safety engineering particularly sought after as performance-based design expands. All of our previous graduates are in relevant employment, with the majority working in fire teams at engineering consultancies.

Minimum entry requirements

A UK 2:1 degree, or its international equivalent (www.ed.ac.uk/international/country), in civil engineering or a related subject. Applicants with backgrounds in other fields may be accepted.

English language requirements

See page 18

Tuition fees in 2012/13*

1 yr FT: UK/EU £5,750; international £17,200

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Programme contact

MSc Administrator

T: +44 (0)131 650 7352 E: pgtenquiries@eng.ed.ac.uk

STRUCTURAL ENGINEERING & MECHANICS

www.ed.ac.uk/pg/21

MSc 1 yr FT (2 yrs PT available for UK/EU students)

Programme description

This MSc, run jointly by the universities of Edinburgh and Glasgow, aims to provide advanced training for structural engineers.

Graduates are trained in a range of analytical methods and tools, with a particular emphasis on computer-based methods using advanced software. You will also develop high-level problem-solving skills, enabling you to think in new and imaginative ways to solve difficult engineering challenges.

Programme structure

This programme is run over 12 months, with two semesters of taught courses followed by a research project leading to a masters thesis. Taught courses will be delivered at the University of Glasgow and the University of Edinburgh.

Semester 1 courses

Plastic Analysis of Frames and Slabs; Fire Resistance of Structures (both taught at Edinburgh); *Applied Engineering Mechanics; Structural Dynamics and Earthquake Engineering* (both taught at Glasgow); plus the self-study *Structural Engineering Review Project*.

Semester 2 courses

Thin-Walled Members and Stability and Mechanics of Repairing and Strengthening of Structures (both taught at Edinburgh), *Computational Modelling of Nonlinear Problems* and *Structural Concrete* (both taught at Glasgow).

Career opportunities

This programme is suitable for those developing careers in structural engineering.

Minimum entry requirements

A UK 2:1 degree, or its international equivalent (www.ed.ac.uk/international/country), in civil engineering or a related subject. Applicants with backgrounds in other fields may be accepted.

English language requirements

See page 18

Tuition fees in 2012/13*

1 yr FT: UK/EU £4,750; international £15,750

2 yrs PT: UK/EU £2,375 per year

Graduates of the universities of Edinburgh and Glasgow qualify for a 10 per cent discount on fees for this programme.

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Programme contact

Postgraduate Admissions Team

T: +44 (0)141 330 4515 E: pgadmissions@glasgow.ac.uk

SUSTAINABLE ENERGY SYSTEMS

www.ed.ac.uk/pg/22

MSc 1 yr FT

Programme description

This internationally renowned degree, based within a world-leading renewable energy research group, offers a broad and flexible programme covering the engineering, economic, environmental and policy aspects of energy systems.

You will receive broad training in energy production, delivery, consumption, efficiency, economics, policy and regulation, in the context of the sustainability of energy supply and consumption patterns, both locally and globally. There will also be opportunities to participate in field trips to power plants.

Programme structure

This programme is run over 12 months, with two semesters of taught courses followed by a research project leading to a masters thesis.

Semester 1 compulsory courses

Technologies for Sustainable Energy; Energy and Environmental Economics; Energy Efficiency, Resource and Environment and either *Electrical Engineering Fundamentals of Renewable Energy* or *Mechanical Engineering Fundamentals of Renewable Energy*.

Semester 2 compulsory courses

Principles of Wind Energy; Marine Energy; Power Systems Engineering and Economics.

Optional additional courses

Depending on quotas and timetabling, we can offer further courses from Engineering as well as Geosciences/Scottish Agricultural College, Mathematics and Social and Political Studies masters programmes.

Career opportunities

You will be able to understand and evaluate alternative modes of energy supply, critically analyse competing claims in the energy sector, analyse the technical and economic interactions of developments in energy systems, preparing you for employment or further research in the field of sustainable energy.

Minimum entry requirements

A UK 2:1 degree, or its international equivalent (www.ed.ac.uk/international/country), preferably in engineering or a physical science. Applicants with backgrounds in other fields may be accepted.

English language requirements

See page 18

Tuition fees in 2012/13*

1 yr FT: UK/EU £5,750; international £17,200

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Programme contact

MSc Administrator

T: +44 (0)131 650 7352 E: pgtenquiries@eng.ed.ac.uk

Research at the School of Engineering

We offer a comprehensive range of exciting research opportunities through a choice of postgraduate research degrees: PhD, EngD, MPhil and MSc by Research. We also provide a range of services to support you to develop your research project to its full potential.

Degree options

MSc by Research

An MSc by Research is based on a research project tailored to a candidate's interests. It lasts one year full time or two years part time. The project can be a shorter alternative to an MPhil or PhD, or a precursor to either – including the option of an MSc project expanding into MPhil or doctorate work as it evolves. It can also be a mechanism for industry to collaborate with the School.

MPhil

The Master of Philosophy (MPhil) degree resembles a PhD but generally takes two years instead of three and does not carry the same requirement for original contribution to knowledge. You pursue your individual research project under supervision, submitting your thesis at the end of the project.

PhD

As a PhD candidate you pursue a research project under continuous guidance, resulting

in a thesis that makes an original contribution to knowledge. In the School of Engineering you will be linked to two academic supervisors and one industrial supervisor if the project is industrially sponsored.

Postgraduate research students work within our five research institutes, which comprise members from our four disciplines: Chemical Engineering, Civil and Environmental Engineering, Electronics and Electrical Engineering and Mechanical Engineering.

Research support

The development of transferable skills is a vital part of postgraduate training and a vibrant, interdisciplinary training programme is offered to all research students. The programme concentrates on the professional development of postgraduates, providing courses directly linked to postgraduate study (for example *Thesis Workshop*, *Paper Production*) and future careers (for example *Career Planning*, *Team Development*).

Courses are free of charge and the programme has been designed to be as flexible as possible so that each student can tailor the content and timing of the programme to their own requirements. Most courses are run several times each year and last for between half a day and a day. Students may attend as many courses as they wish and a transcript of the courses attended can be provided on request. For more information visit www.scieng.ed.ac.uk/transkil.htm.

Showcase your work

Our researchers are strongly encouraged to present their research at conferences and in journal papers during the course of their PhD. They are also encouraged and supported to attend transferable skills courses provided by organisations such as the Engineering and Physical Sciences Research Council.

Business development

The role of our business development team is to help form industry partnerships, including through sponsored research, to enable the commercialisation of University intellectual property and successful technology transfer. Edinburgh Research and Innovation (ERI), the University's research and commercialisation office, also provides a complete range of services for researchers, inventors, consultants and entrepreneurs in the University's academic community. For more information visit www.research-innovation.ed.ac.uk.

Career prospects

Research graduates enter a wide range of fields including communications, defence, medical imaging, engineering consultancy, construction, renewable energy and the semiconductor industry. Many go on to further research. Opportunities for our PhD graduates include postdoctoral fellowships, lecturing roles and research contracts in universities, research institutes or industry.



Research opportunities

DIGITAL COMMUNICATIONS

www.ed.ac.uk/pg/24

PhD 3 yrs FT (6 yrs PT available for UK/EU)

MPhil 2 yrs FT (4 yrs PT available for UK/EU)

MSc by Research 1 yr FT (2 yrs PT available for UK/EU)

Research environment

The Institute for Digital Communications has three major centres of activity: Signal Processing, Communications Systems and the Centre for Communications Interface Research. The Institute has excellent research facilities, including state-of-the-art computing systems and laboratories for usability engineering, audio signal processing and visible light communications.

The Institute is internationally recognised for its research on communications systems and signal processing. Current activities include topics such as: green radio; visible light communications; cognitive radio; compressive sensing; distributed sensor signal processing; multi-modal signal processing. It was recently awarded a UK research council Platform Grant in Sensor Signal Processing in collaboration with the Joint Research Institute in Signal & Image Processing with Heriot Watt University.

Tuition fees in 2012/13*

PhD 3 yrs FT: UK/EU £3,828; international £15,000 per year

PhD 6 yrs PT: UK/EU £1,914 per year

MPhil 2 yrs FT: UK/EU £3,828; international £15,000 per year

MPhil 4 yrs PT: UK/EU £1,194 per year

MSc by Research 1 yr FT: UK/EU £5,750; international £17,200

MSc by Research 2 yrs PT: UK/EU £5,750 per year

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Contact: E: pg-admissions@see.ed.ac.uk T: +44 (0)131 651 7213

ENERGY SYSTEMS

www.ed.ac.uk/pg/25

PhD 3 yrs FT (6 yrs PT available for UK/EU)

MPhil 2 yrs FT (4 yrs PT available for UK/EU)

MSc by Research 1 yr FT (2 yrs PT available for UK/EU)

Research environment

The Institute for Energy Systems (IES) is a world-leading centre of research in marine and renewable energy, and is home to international expertise covering energy and climate change, machines and power-electronic interfaces and power-system operation and control. Current research areas include marine and renewable energy conversion; coastal defence; direct-drive slow-speed electrical machines; power electronic conversion and conditioning, power systems operation and control.

IES leads the Engineering and Physical Sciences Research Council's SuperGen Marine Energy Consortium and is a member of another four EPSRC SuperGen consortia. IES also co-hosts the UK Energy Research Centre and collaborates in a Joint Research Institute in Energy with Heriot-Watt University. The Institute hosts the unique All-Waters Combined Current and Wave Test Facility, which is the world's most sophisticated large marine energy test laboratory.

Tuition fees in 2012/13*

PhD 3 yrs FT: UK/EU £3,828; international £15,000 per year

PhD 6 yrs PT: UK/EU £1,914 per year

MPhil 2 yrs FT: UK/EU £3,828; international £15,000 per year

MPhil 4 yrs PT: UK/EU £1,194 per year

MSc by Research 1 yr FT: UK/EU £5,750; international £17,200

MSc by Research 2 yrs PT: UK/EU £5,750 per year

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Contact: E: pg-admissions@see.ed.ac.uk T: +44 (0)131 651 7213



INFRASTRUCTURE AND THE ENVIRONMENT

www.ed.ac.uk/pg/26

PhD 3 yrs FT (6 yrs PT available for UK/EU)

MPhil 2 yrs FT (4 yrs PT available for UK/EU)

MSc by Research 1 yr FT (2 yrs PT available for UK/EU)

Research environment

The Institute for Infrastructure and Environment is among the leading centres of civil and environmental engineering research in the UK. We seek new technologies to solve real-world problems in order to promote sustainability.

Key research areas include behaviour and design of structures in fire and other extreme events; fire science and fire safety engineering; shells and containment structures, nonlinear finite element modelling of complex structures and structural collapses; mechanics and transport of granular materials and multiphase media; computational mechanics and bio-mechanics; fibre-reinforced polymer composites in structural strengthening and repair; high-speed rail; intelligent infrastructure and NDE; sustainable water and wastewater treatment technologies; water supply; and waste management and resource recovery.

The Institute has excellent laboratory and computing facilities, including the latest facilities and instrumentation for experimental and computational research in structures, granular solids, fire safety engineering, NDT and environmental engineering.

Tuition fees in 2012/13*

PhD 3 yrs FT: UK/EU £3,828; international £15,000 per year

PhD 6 yrs PT: UK/EU £1,914 per year

MPhil 2 yrs FT: UK/EU £3,828; international £15,000 per year

MPhil 4 yrs PT: UK/EU £1,194 per year

MSc by Research 1 yr FT: UK/EU £5,750; international £17,200

MSc by Research 2 yrs PT: UK/EU £5,750 per year

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Contact: E: pg-admissions@see.ed.ac.uk T: +44 (0)131 651 7213

You might also be interested in:

Architecture or Landscape Architecture (Edinburgh College of Art Prospectus)

INTEGRATED MICRO & NANO SYSTEMS

www.ed.ac.uk/pg/27

PhD 3 yrs FT (6 yrs PT available for UK/EU)

MPhil 2 yrs FT (4 yrs PT available for UK/EU)

MSc by Research 1 yr FT (2 yrs PT available for UK/EU)

Research environment

Research interests in electronic design range from low-level analogue through low-power, adaptive and bio-inspired approaches to system-on-chip level. Applications range from telecommunications through financial to astronomical. In addition we have a strong and growing interest in applications relating to life sciences and medicine, with particular focus on bioelectronics, biophotonics and bio-MEMS. The Institute for Integrated

Micro & Nano Systems has laboratory facilities that are unique within the UK. These include a comprehensive silicon and MEMS micro-fabrication capability coupled with substantial design and test resources. The Institute has an excellent reputation for commercialising technology.

Tuition fees in 2012/13*

PhD 3 yrs FT: UK/EU £3,828; international £15,000 per year

PhD 6 yrs PT: UK/EU £1,914 per year

MPhil 2 yrs FT: UK/EU £3,828; international £15,000 per year

MPhil 4 yrs PT: UK/EU £1,194 per year

MSc by Research 1 yr FT: UK/EU £5,750; international £17,200

MSc by Research 2 yrs PT: UK/EU £5,750 per year

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Contact: E: pg-admissions@see.ed.ac.uk T: +44 (0)131 651 7213

You might also be interested in:

Cognitive & Neural Systems (Medicine & Veterinary Medicine Prospectus)

MATERIALS & PROCESSES

www.ed.ac.uk/pg/28

PhD 3 yrs FT (6 yrs PT available for UK/EU)

MPhil 2 yrs FT (4 yrs PT available for UK/EU)

MSc by Research 1 yr FT (2 yrs PT available for UK/EU)

Research environment

The Institute for Materials & Processes (IMP) brings together researchers from materials science and chemical, mechanical and bio-engineering.

IMP delivers world-class research on the design, synthesis and processing of materials and fluids, as well as process and biomedical engineering, and provides high-quality training in research for both postgraduate students and postdoctoral researchers. The Institute's research activities mainly focus on three areas: carbon capture and storage; biomedical and biological engineering; and materials, fluids, manufacture and processes.

Tuition fees in 2012/13*

PhD 3 yrs FT: UK/EU £3,828; international £15,000 per year

PhD 6 yrs PT: UK/EU £1,914 per year

MPhil 2 yrs FT: UK/EU £3,828; international £15,000 per year

MPhil 4 yrs PT: UK/EU £1,194 per year

MSc by Research 1 yr FT: UK/EU £5,750; international £17,200

MSc by Research 2 yrs PT: UK/EU £5,750 per year

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Contact: E: pg-admissions@see.ed.ac.uk T: +44 (0)131 651 7213

You might also be interested in:

Chemistry or Materials Chemistry (Chemistry Prospectus)

Taught professional doctorate

Professional doctorates are specialist qualifications aimed at professional development. The School of Engineering is home to a professional doctorate programme in offshore renewable energy, which provides a vocationally oriented qualification with the same academic standing and rigour as a PhD.

OFFSHORE RENEWABLE ENERGY

www.ed.ac.uk/pg/785

www.idcore.ac.uk

EngD 4 yrs FT

Programme description

The universities of Edinburgh, Strathclyde and Exeter together with the Scottish Association for Marine Science and HR-Wallingford have formed a partnership to deliver the RCUK/ETI Industrial Doctorate Centre for Offshore Renewable Energy (IDCORE). IDCORE offers a four-year EngD (Engineering Doctorate) programme. EngD students follow a programme based on three elements: postgraduate-level training, transferable skills and engineering research leadership.

Programme structure

You'll spend the first two terms attending an intensive programme of 12 taught courses delivered by internationally renowned academic staff from the partner universities. These first two terms provide students with the skills required for an industry environment and to get started on their research activities. Practical courses teach important laboratory and fieldwork skills, while a group design project helps you to develop teamworking skills and apply your knowledge.

Following this initial period of teaching in Edinburgh, you'll join your sponsoring company to work as a researcher for the rest of the programme. The industrial research is supplemented by summer schools delivered in Oban, Wallingford and Falmouth, and online integrated studies in management, business, innovation, enterprise and entrepreneurship.

At the end of your research work you'll deliver a portfolio of evidence that is examined for the award of an Engineering Doctorate in Offshore Renewable Energy, which is a joint degree from the universities of Edinburgh, Exeter and Strathclyde.

Funding

A scholarship that provides a student stipend of £15,090, rising to £17,000, covers the tuition fees and is available for suitably qualified applicants. There are normally 10 of these scholarships available for each intake of students and they

are awarded competitively. To be eligible for a full award (stipend and fees) you must:

- have settled status in the UK
- be 'ordinarily resident' in the UK for three years prior to the start of the grant (normally residing in the UK)
- not be residing in the UK wholly or mainly for the purpose of full-time education (this does not apply to UK or EU nationals.)

Students from EU countries other than the UK are eligible for a fees-only award if they are ordinarily resident in a member state of the EU. There is a small quota of full studentships for exceptional EU and international candidates. Applications from self-funded candidates will also be considered.

Minimum entry requirements

A UK first-class degree, or its international equivalent (www.ed.ac.uk/international/country). Students with an upper second class degree and a subsequent MSc degree will also be considered. It is expected that candidates will have a good understanding of one or more branches of science or engineering and at least some relevant research experience.

English language requirements

See page 18

Tuition fees in 2012/13*

4 yrs FT: UK/EU £3,828; international £15,000 per year

*Fees change annually. Latest information at www.ed.ac.uk/student-funding.

Programme contacts

Programme Director: Professor David Ingram

Programme Administrator: Ksenia Siedlecka

E: info@idcore.ac.uk



Funding

A large number of scholarships, loans and other funding schemes are available for your postgraduate studies. You can find the full range at www.ed.ac.uk/student-funding.

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

Below we list a selection of potential sources of financial support for postgraduate students applying to the School of Engineering. Where an entry does not include a web address, please use the web link above to navigate to the particular award.

University of Edinburgh scholarships

China Scholarships Council/University of Edinburgh Scholarships

A number of scholarships for PhD study to candidates who are citizens and residents of China. www.ed.ac.uk/student-funding/china-council

College of Science & Engineering

The College of Science & Engineering has funds from endowments and donations that are available to provide funding for studentships. Individual Schools also receive considerable support from other organisations such as charities, trusts and industrial sponsors.

The David Mayes Scholarship

A scholarship to pursue research in the field of silicon chip design.

www.ed.ac.uk/student-funding/david-mayes

Edinburgh Global Masters Scholarships

A number of scholarships available to international students for masters study.

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

Edinburgh Santander Masters Scholarships

Several scholarships are available to students from a number of countries for masters study. www.ed.ac.uk/student-funding/santander

Edinburgh UK/EU Masters Scholarships

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

The Maudslay Scholarship

A scholarship is available to Mexican nationals studying on a masters programme within the School of Engineering. www.ed.ac.uk/student-funding/maudslay

Panasonic Trust Fellowships

The fellowships provide financial support to selected graduate engineers wishing to study full-time masters programmes in subjects with a bias towards energy, sustainability, infrastructure, environmental technology and water resource engineering, specifically the MSc Environmental Sustainability and MSc Sustainable Energy Systems degree programmes.

www.panasonictrust.net/fellowships/default.aspx

Principal's Career Development PhD Scholarships

A number of awards, open to UK, EU and international PhD students.

www.ed.ac.uk/student-funding/development

Principal's Indian Masters Scholarships

15 scholarships are available to students from India for masters study.

www.ed.ac.uk/student-funding/masters-india

Other sources of funding

Commonwealth Scholarships

For students who are resident in any Commonwealth country, other than the UK.

www.dfid.gov.uk/cscuk

Fulbright Scholarships

Scholarships open to US graduate students in any subject wishing to study in the UK.

www.iie.org/fulbright

Marshall Scholarships

Open to outstanding US students wishing to study at any UK university for at least two years. www.marshallscholarship.org

Scotland's Saltire Scholarships

A number of scholarships open to citizens of Canada, China, India and the US, undertaking masters-level study in Scotland.

www.ed.ac.uk/student-funding/saltire

The University of Edinburgh Graduate Discount Scheme

We offer a 10 per cent discount on postgraduate fees for all alumni who have graduated with an undergraduate degree from the University. www.ed.ac.uk/student-funding/discounts

Robert Starr

MSc High Performance Computing Scotland's Saltire Scholarship



"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 prior to starting my studies at Edinburgh."

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 from 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

Financial aid

The Canada Student Loans Program

The University is eligible to certify Canadian student loan applications. Full details on eligibility and how to apply can be found online.

www.ed.ac.uk/student-funding/canadian-loans

The Student Awards Agency for Scotland

This department of the Scottish Government has offered loans to postgraduate students in the past. At time of going to press arrangements for study in 2013/14 were under review.

www.saas.gov.uk

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



How to apply

General entrance requirements

For the majority of programmes – taught and research – applicants will need a UK 2:1 degree, or its international equivalent, in engineering, physical sciences or mathematics.

Entrance requirements for some programmes may differ, so please check the details for the programme or programmes you are interested in. For taught masters programmes, please feel free to contact the MSc administrator listed to discuss your application further.

Application process

Applications for all postgraduate study are made online. Start with the Degree Finder to identify your chosen programme: www.ed.ac.uk/pg/degrees. In certain circumstances you should apply by post, for example if your degree requires an application via an external organisation or if you are unable to use the online process. Contact the College of Science & Engineering about postal applications.

Taught programme applicants

Applicants for taught programmes are encouraged to write a personal statement, and should include information on relevant knowledge and training. We advise candidates to complete these as fully as possible, including details of why you have applied to

study your chosen programme and how your experience and skills are relevant.

Research applicants

For research students, suggested projects are available on the research institutes' web pages (www.see.ed.ac.uk/drupal/research). We welcome any project proposal that fits with the School's research plans and supervisory capabilities.

If you are applying for a research degree, we strongly recommend that you contact us to discuss your proposed programme of study. This is particularly important as the School must ensure the availability of facilities and expert supervision.

Our selection process for PhD programmes is competitive. Experience working within your chosen field can be beneficial but an MSc is not required for entrance to doctorate degree studies.

Your online account

The application process creates an online account with us that means you do not need to complete your online application in one go – you can save your application at any stage and resume the process at a later time.

You should submit your application as early as possible in the academic year prior to your chosen year of study. Our postgraduate programmes are in high demand and

scholarship deadlines might apply, both of which mean there are advantages to applying early. You should not wait for examination results or the outcome of scholarship applications before you apply.

You will need to upload copies of your qualifications and any other supporting information. You will also need to provide references in support of your applications. For details see www.ed.ac.uk/pg/applying/references.

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. Please visit 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. Contact details for all our agents can be found at 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 in the box below.

IELTS 6.5 (with no score lower than 6.0 in each section)

TOEFL iBT Total 92 (with no score lower than 20 in each section).

Pearson Test of English 61 (with no score lower than 56 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
- Your English language certificate must be no more than two years old at the beginning of your degree programme.
- A degree from an English-speaking university may be accepted in some circumstances.
- Cambridge tests are accepted only for applicants who do not need Tier 4 visas to enter the UK.

Get in touch

Contact us

For more information about MSc programmes at the School of Engineering contact:

MSc Administrator

School of Engineering
Faraday Building
The King's Buildings
Edinburgh EH9 3JL

T: +44 (0) 131 650 7352

E: pgtaught@eng.ed.ac.uk

For more information about applying for our research programmes, contact:

The Graduate School

School of Engineering
Faraday Building
The King's Buildings
Edinburgh EH9 3JL

T: +44 (0)131 651 7213

E: pg-admissions@see.ed.ac.uk

To discuss your research proposal, please contact potential supervisors. Details can be found at the Research Institutes' web pages, via **www.see.ed.ac.uk/postgraduate**.

For information about the taught professional doctorate contact:

Industrial Doctoral Centre for Offshore Renewable Energy

IDCORE office
The King's Buildings
Edinburgh EH9 3JL

T: +44 (0)131 651 9023

E: info@idcore.ac.uk

For general enquiries contact:

Director of Teaching

Mr Stephen Warrington
E: S.W.Warrington@ed.ac.uk

Director of Research

Professor Stefano Brandani
E: S.Brandani@ed.ac.uk

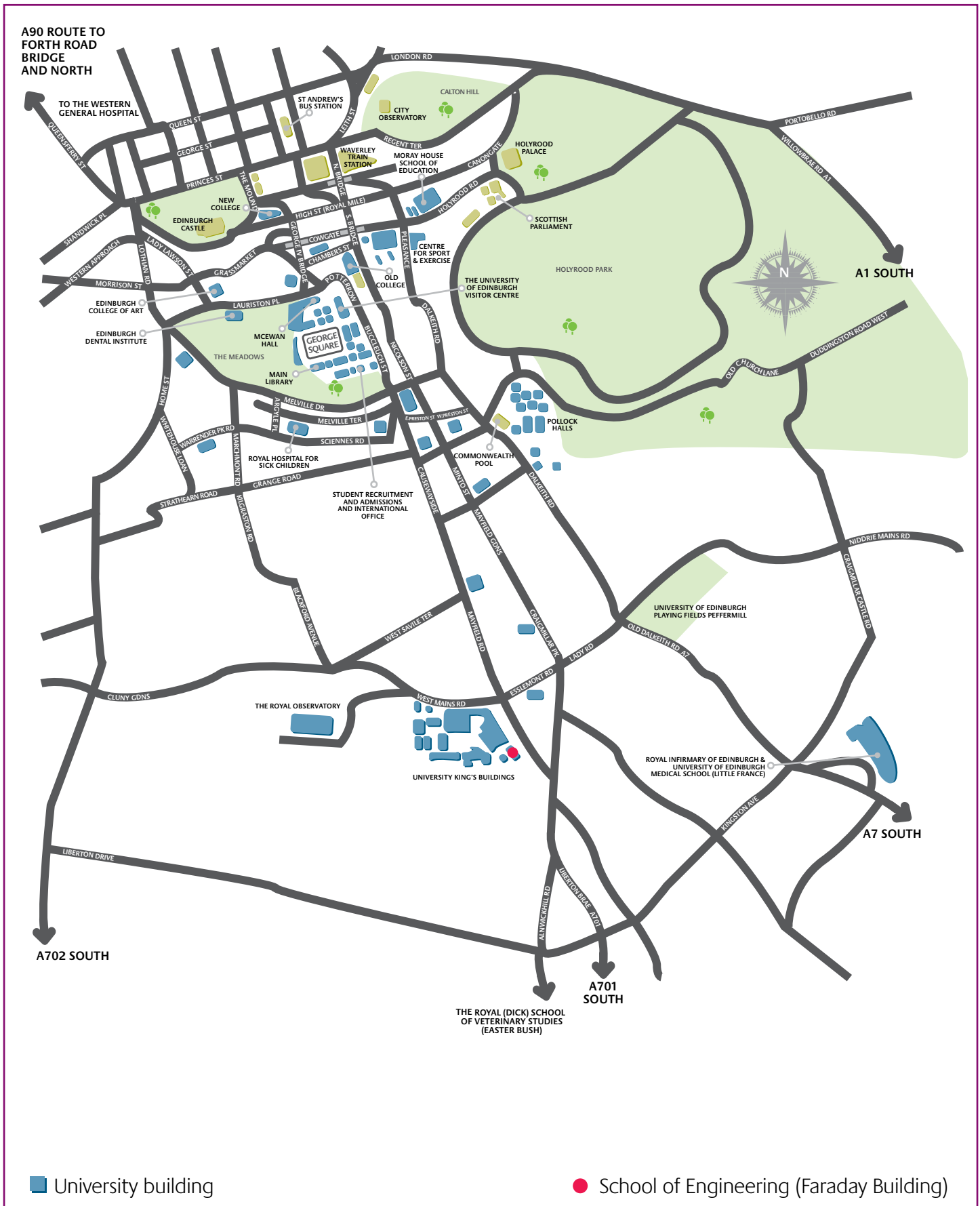
Visit us

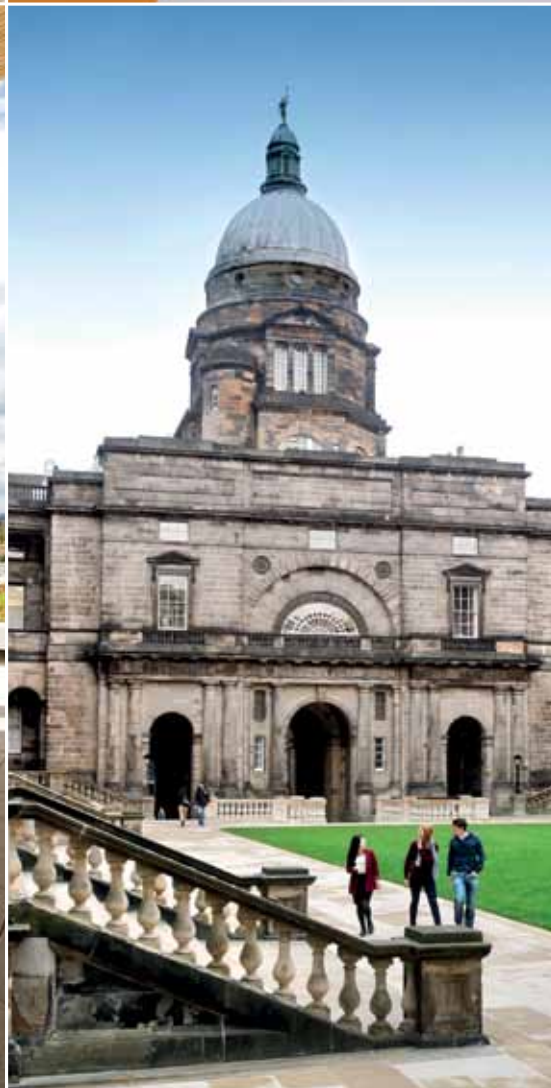
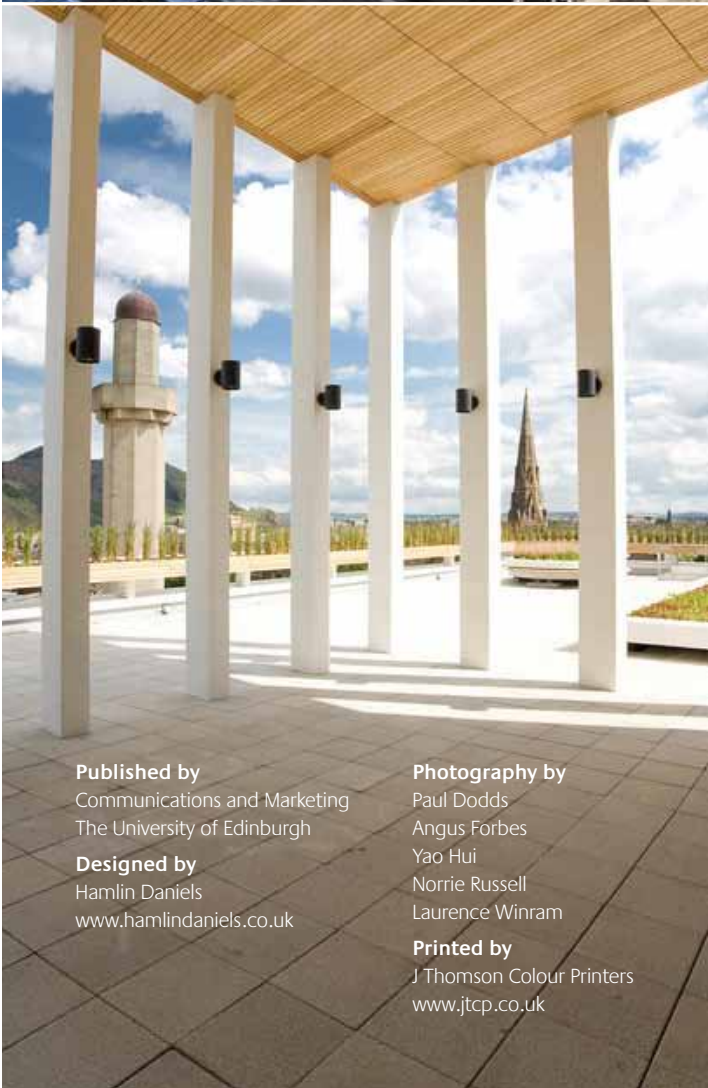
Our postgraduate Open Day is your opportunity to come and meet current staff and students. Our next campus-based Open Day takes place on Friday 23 November 2012. For further details, please visit **www.ed.ac.uk/postgraduate-open-day**.

We also run online information sessions for prospective postgraduate students throughout the year. To find out more, visit **www.ed.ac.uk/pg/open-day/online-events**.



Campus map





Published by
Communications and Marketing
The University of Edinburgh

Designed by
Hamlin Daniels
www.hamlindaniels.co.uk

Photography by
Paul Dodds
Angus Forbes
Yao Hui
Norrie Russell
Laurence Winram

Printed by
J Thomson Colour Printers
www.jtcp.co.uk



Postgraduate Open Day:

23 November 2012

Induction Week:

9–13 September 2013

Semester 1:

16 September–20 December 2013

Semester 2:

13 January–23 May 2014



FSC

This publication is available online at www.ed.ac.uk and can be made available in alternative formats on request.
Please contact Communications.Office@ed.ac.uk or call +44 (0)131 650 2252.

© The University of Edinburgh 2012. No part of this publication may be reproduced without written permission of the University.
The University is a charitable body, registered in Scotland, with registration number SC005336.