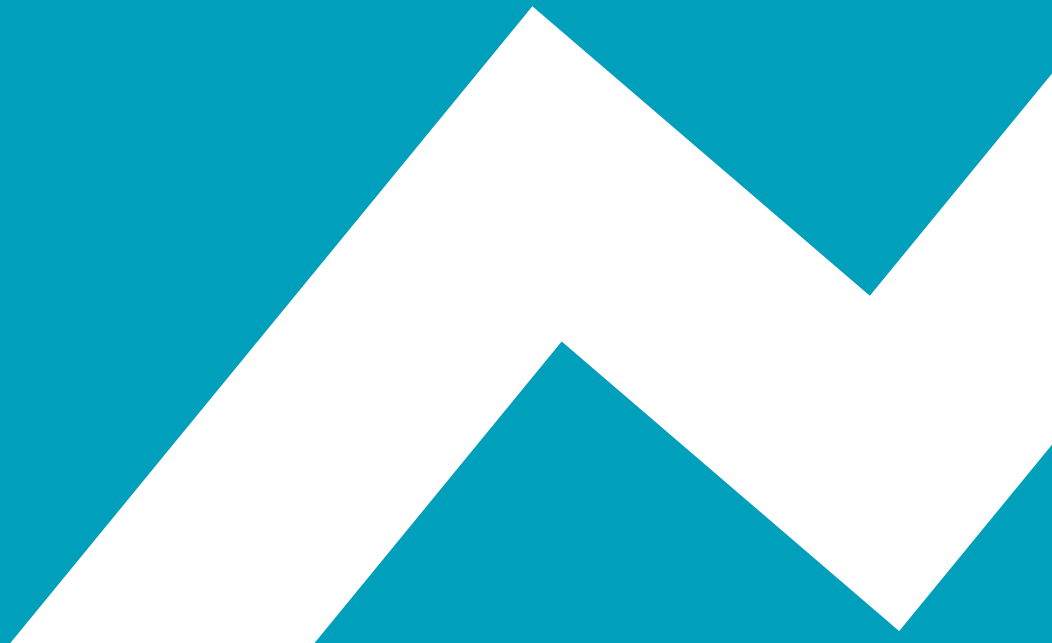


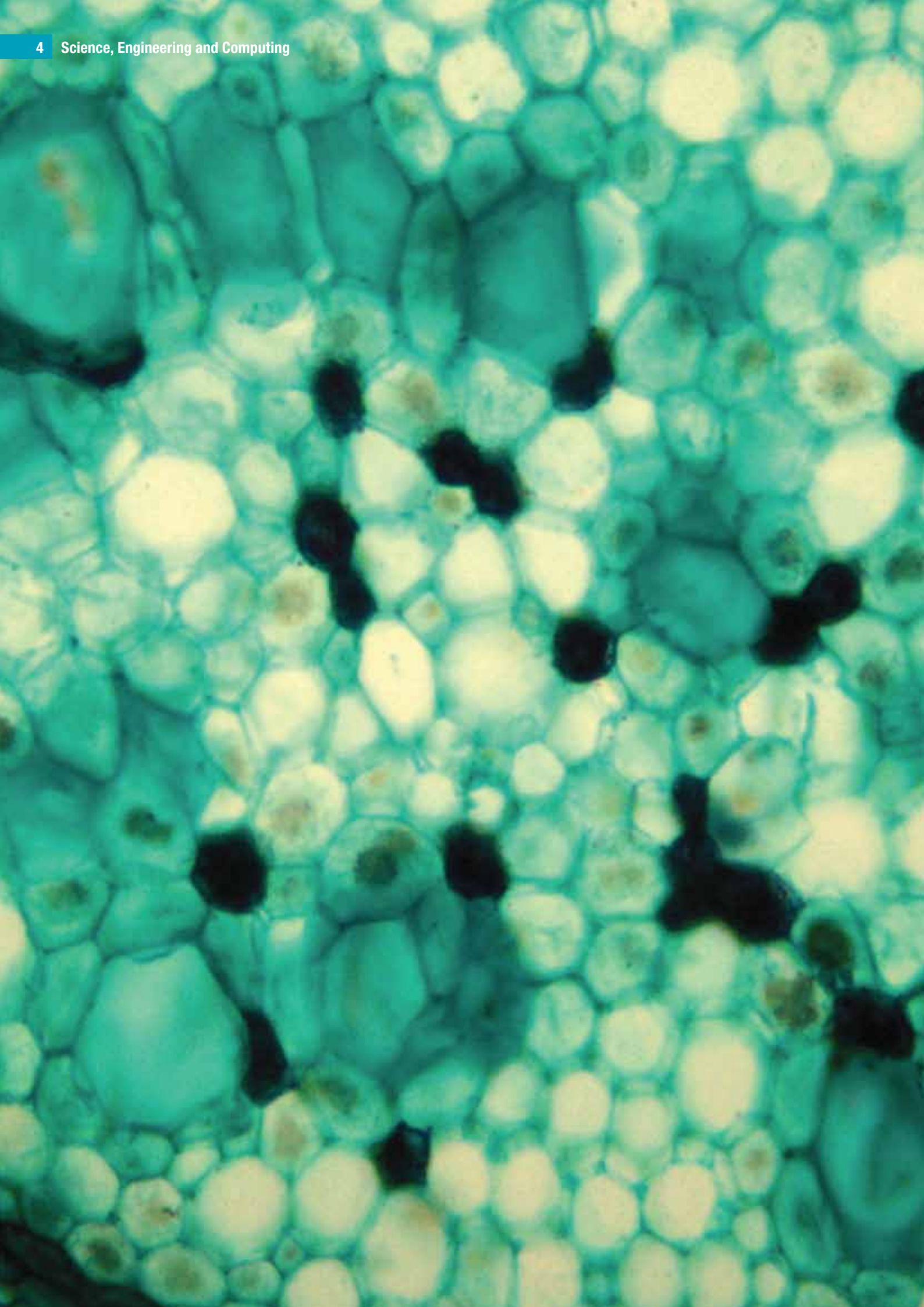


# A shrewd investment



If you've got ambitions to **get ahead**, we can help. A postgraduate degree from Kingston University represents a shrewd investment, whether you aim to use your qualification to stand out from the crowd when applying for jobs, or to help you gain that all-important promotion. At Kingston, you'll find top-quality, accredited courses; expert teaching based on research and practice; and flexible study options that enable you to fit your studies around other commitments. We attract a very diverse range of students, so you'll be part of a lively and stimulating community, sharing experience and knowledge from around the world.

It's an exciting time to be joining Kingston's Faculty of Science, Engineering and Computing – our dynamic, multidisciplinary environment means that you'll have access to a broad range of high-quality facilities across all the disciplines, offering you the opportunity to broaden your horizons and take advantage of our extensive links with business and industry. Many of our courses are also accredited by the relevant bodies, giving you a head start in your chosen career.



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To find out more about each course, including entry requirements, examples of modules and the duration of the course, see the course webpage.



The new Faculty of Science, Engineering and Computing came into being in August 2011, bringing all of the STEM subjects (science, technology, engineering and mathematics) under one umbrella. It builds on existing excellence in these subjects at Kingston and provides students with a broad canvas while maintaining Kingston's outstanding teaching experience through a structure based on eight schools.

On behalf of all the Faculty's lecturers and outstanding support staff, I look forward to welcoming you to Kingston University and its newest faculty.

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Professor Edith Sim, Dean of the Faculty of Science,  
Engineering and Computing

# Your career in focus

A postgraduate course can offer many career benefits: it can provide deeper, specialist knowledge; give you a competitive edge in a challenging job market; enable you to retrain for a different profession; or refresh your existing professional skills. At Kingston University, we offer a range of qualifications – from PgDip to PhD – across the disciplines of science, computing and engineering. So, whatever career stage you're at, we're likely to have a course that suits you.

## Introducing the Faculty of Science, Engineering and Computing

While many other higher education institutions have been reducing their capacity for teaching science, technology, engineering and mathematics (STEM) subjects, Kingston University has successfully maintained a strong base in these subjects, both in terms of teaching and research – our innovative portfolio includes ground-breaking courses; many of our courses are franchised across the world; and our research output has increased in both quality and quantity.

By combining broad disciplines into one large department, the Faculty of Science, Engineering and Computing offers opportunities for both students and staff to extend their intellectual experience across the disciplines. A series of cross-Faculty talks and events, open to all students, will enable you to broaden your educational experience and introduce you to the research and learning and teaching opportunities available across the Faculty.

Close collaborations with other higher education institutions, professional accrediting bodies and business and industry also ensure that our courses are kept fresh and up to date with the latest industry standards. In addition, the Faculty has entered into a consortium with commercial partners – the European Enterprise Network – with the Faculty acting as a one-stop-shop for new businesses in the London boroughs to gain access to Kingston expertise across the entire STEM area.

## What's on offer?

We're keen to ensure that you graduate as a marketable industry professional with the skills and knowledge to get you ahead in today's commercial environment. Our aim is to provide you with the tools, skills and opportunities to progress your career or even start up your own business.

- Our courses are regularly updated with direct input from our industrial and business partners to ensure that they meet industry needs.
- We have set up advisory/industrial committees for many of our courses to ensure the latest technologies and information are included.
- External lecturers, who are experts in their fields and working in industry, are invited to talk to you about the latest developments.
- You may have the opportunity to tailor your course to suit your career development needs, industry background or organisation's requirements.
- The majority of our MSc programmes include a major independent project, which is often carried out in industry and gives you the opportunity to tackle a real-world problem. Examples of previous projects include improving end-to-end customer care at Vodafone, and developing a new aerodynamic package for the Formula Jedi.
- Some of our modules are available in distance-learning mode – you can even attend lectures in Second Life – enabling you to fit your studies around your other commitments.

As well as developing your academic and industrial knowledge, we also strive to develop your personal skills and abilities to enable you to succeed in your career. Our courses are structured to include work-based topics such as time management, teamworking, presentation and people-based skills.

## Funding your studies

Information about money matters and funding can be found on our website at [www.kingston.ac.uk/pgfunding](http://www.kingston.ac.uk/pgfunding) or from: Student Funding Service  
Kingston University  
Cooper House  
40–46 Surbiton Road  
Kingston upon Thames  
Surrey KT1 2HX  
T: +44 (0)20 8417 3553

Your employer may offer to sponsor you through your course by providing funding, day-release from work or guaranteed study leave. If your employer has any questions, please ask them to contact the person detailed on the relevant course webpage.

## Open days

If you would like to find out more about how Kingston University can help you to enhance your career, why not pay us a visit and have a chat with our course directors?

To find out when the next postgraduate open days are being held, contact [pgsecadmissions@kingston.ac.uk](mailto:pgsecadmissions@kingston.ac.uk)

# Choose Kingston

Kingston University provided a diverse environment in which to study. The course is well established; covers a broad range of environmental issues, from biodiversity to waste management; and opens opportunities in a wide range of environmental and sustainability jobs. An MSc from Kingston has given me the edge in interviews and helped me find a job in the sustainable energy sector.

---

Duncan Carter, MSc Environmental and Earth Resource Management graduate

Impressed by the numerous labs, wind tunnels, cars, bikes, Lear jet, engine chambers and the like at Roehampton Vale, it became clear that the University could offer me a vast range of facilities on any of the courses I chose. I also had access to many other facilities at other campuses – from electron microscopes to help from research students in any department; in my case, computer vision.

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Tiffany Rose, MSc Automotive Engineering graduate (now working as an operations engineer for a worldwide logistics company)

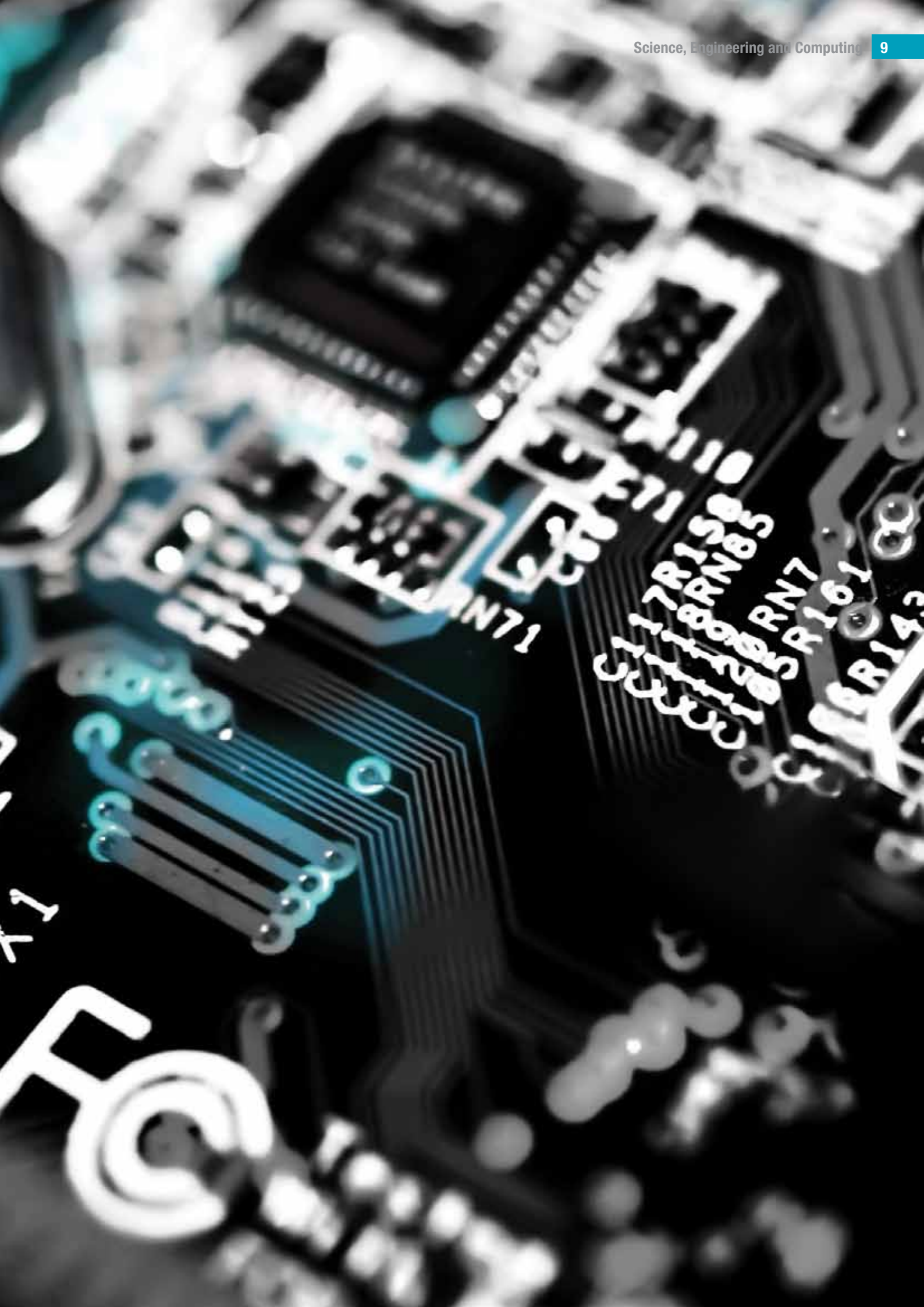
I am convinced I made the right choice by coming to Kingston: the lecturers are highly qualified and involved in interesting and relevant research projects. They bring a lot of enthusiasm and current knowledge to their lectures, and their learning materials are of very high quality.

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Isha Nunkoo, MSc IT & Strategic Innovation graduate, 2008 (now working for Fujitsu UK)







# Schools of thought

The Faculty is split into eight schools. Although each school has its own individual character, cross-disciplinary research and teaching are key features.



## Aerospace and Aircraft Engineering

Kingston University has played a leading role in the training of aerospace engineers since 1912 and the opening of the Sopwith Aviation Company. Our aerospace engineering field is one of the largest and fastest expanding in the UK.



## Civil Engineering and Construction

We have successfully embedded the concept of sustainable development in all of our civil engineering and construction programmes. Our courses also satisfy the Engineering Council's UK Standard for Professional Engineering Competence (UK-SPEC) as a 'period of further learning' for registration as a chartered engineer.



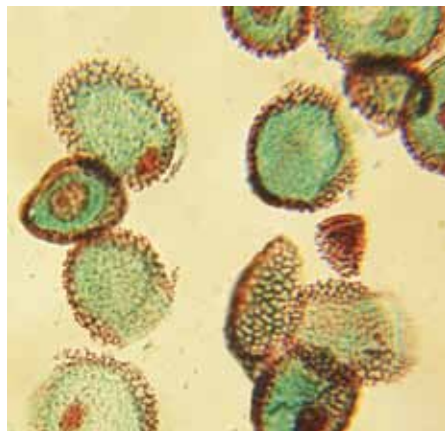
## Computing and Information Systems

Our computing and information systems courses are offered with a management studies option, providing you with both the technical and business skills to get ahead.



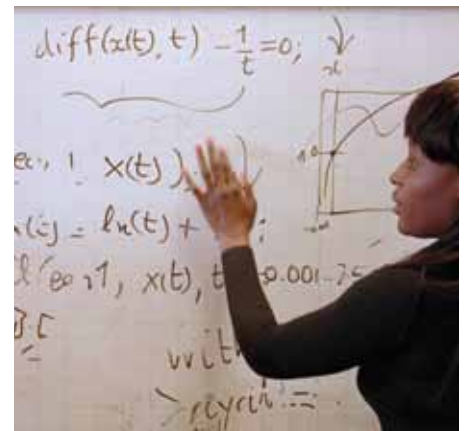
## Geography, Geology and the Environment (GGE)

Kingston is one of only two universities in Europe to be awarded Esri Development Centre status, which rewards universities for their exemplary GIS programmes. We also offer highly innovative courses in earth and environmental sciences, often including field trips to put your studies into context.



## Life Sciences

Our life sciences courses include a research project within the masters programme, which can be carried out with one of our established research groups, during a placement in a laboratory in industry or with the NHS, or at your place of work, if appropriate.



## Mathematics

We're currently working on expanding our range of postgraduate mathematics courses, and are developing a course in actuarial science. Check our website for the latest information.



### Mechanical and Automotive Engineering

To ensure that your learning meets with the latest industry criteria and standards, our mechanical and automotive engineering courses are regularly reviewed by the relevant accreditation bodies – the Institution of Engineering and Technology (IET) and the Institution of Mechanical Engineers (IMechE).



### Pharmacy and Chemistry

Strong links with hospitals and community pharmacies, accreditation from industry bodies and involvement with active research groups ensure that our pharmacy and chemistry courses will prepare you for today's employment market. In addition, our Analytical Chemistry and Pharmaceutical Analysis courses provide exemption from Part A of the Mastership in Chemical Analysis, which is the statutory qualification for a public analyst.

## Find out more

More information about our schools and their activities can be found at the beginning of each course section or on the University's website.



### Digital Media Kingston

We also have a cross-faculty collaboration with the Faculty of Art, Design & Architecture and the Faculty of Arts and Social Sciences to deliver courses in digital media.

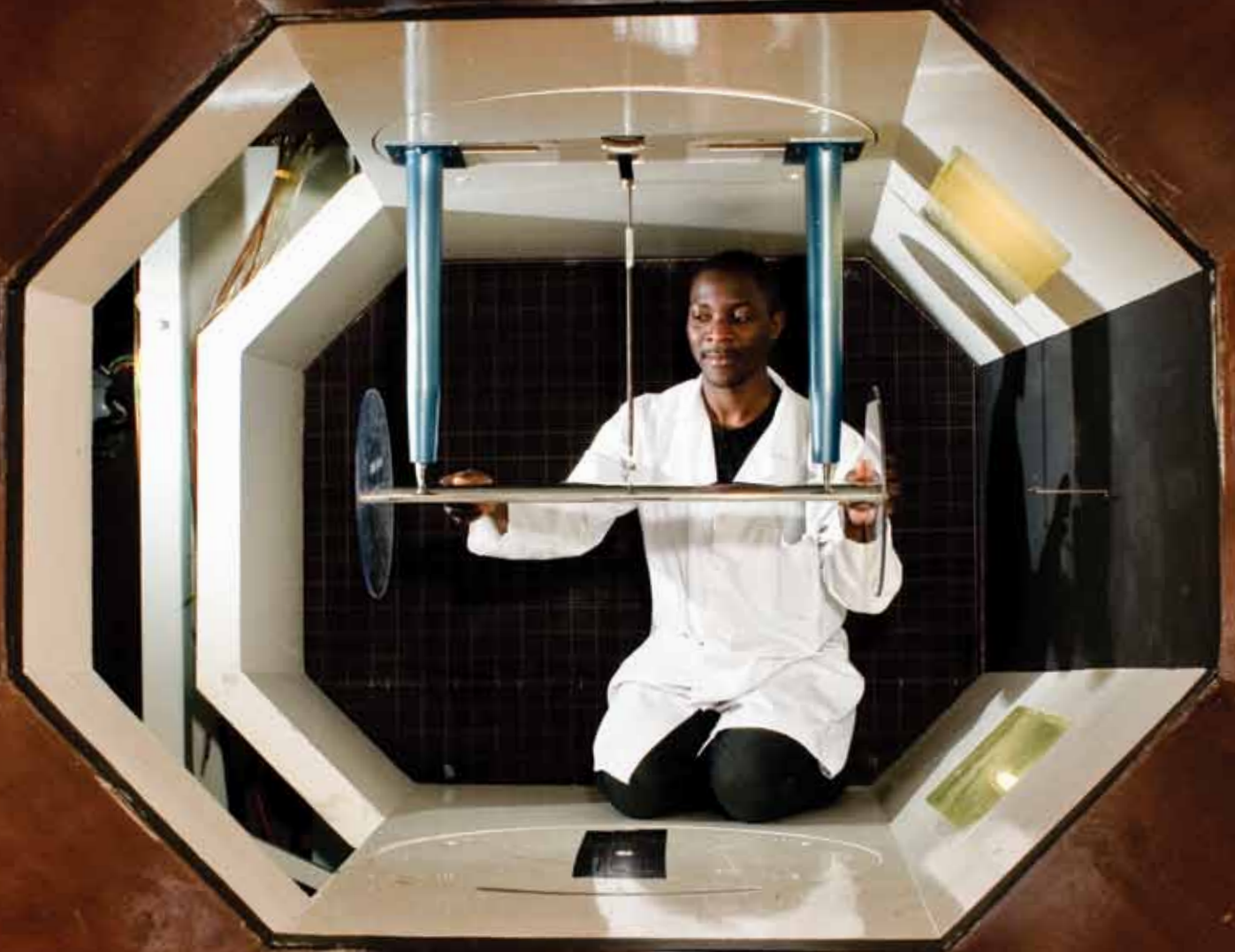
Dreamworks, Sony Computer Entertainment Europe and Samsung Design Europe are among the top firms who have helped us refine this new suite of industry-facing courses that combine design with computing in a microstudio environment.

# Equipped for success

As a member of our large, multidisciplinary Faculty, you'll have the opportunity to work in our range of impressive laboratories equipped with the latest technology.

- Test your designs in winds of up to 90mph in our large-scale wind tunnels.
- Master your forensic investigation skills in our 'scene-of-crime' house.
- Improve your CAD/CAM skills with packages including Ideas, SolidWorks and AutoCad.
- Check out the Lotus Exige, Triumph Daytona and Honda quad bike in our automotive, motorsport and motorcycle lab.
- Refine your skills in our pharmacy practice lab.
- Conduct experiments in a weightless environment using our new drop tower.
- Programme the Merlin flight simulator with a mathematical model of your aircraft design to monitor the results.
- Get hands-on experience of installing and configuring network equipment using our dedicated research and development network infrastructure.
- Visit the spectroscopy lab, which includes infrared, UV/visible and magnetic resonance spectroscopy.
- Put your construction designs to the test in our curing chambers, which simulate climatic conditions from the Arctic to hot and humid environments.
- Use state-of-the art Ion Torrent sequencing technology to generate genome sequence data, investigate mixed populations from patient or environmental samples, and assay gene expression.

This is just a taster of the equipment you can expect to be using. You can find out more about all the facilities we have on offer by checking out our website.



# An industry-focused approach

Many of our courses are developed in collaboration with and are accredited by the relevant professional organisations, ensuring that you receive an education related to the latest developments in the workplace.

## Collaborative partners

**The SouthWest London Academic Network**  
The SouthWest London Academic Network (SWan) links biomedical, life science, health and social care students and researchers with practitioners and employers to develop the leading professionals of today and the future.

Using virtual learning technologies and innovative research, SWan brings together the energy, ideas and expertise of Kingston University, Royal Holloway, University of London and St George's, University of London. SWan draws on the complementary strengths of its partners to create new ways of addressing the major social and scientific issues of the day.

Our Biotechnology PgCert/PgDip/MSc programme is delivered in collaboration with SWan's Institute of Biomedical Science, ensuring access to the latest technologies and expertise, including specialist laboratories, across all three universities.

## Links with industry

We have established strong links with business and industry to ensure that your learning is relevant to the workplace, meeting professional and industry needs.

### The Concrete Centre

The Concrete Centre is the central development organisation for the UK concrete sector, providing material, design and construction guidance. Our Sustainable Construction course is delivered in association with The Concrete Centre and in consultation with other leading industrial specialists. Find out more about sustainable concrete from The Concrete Centre's sister website: [www.sustainableconcrete.org.uk](http://www.sustainableconcrete.org.uk)

### Local hospitals

Our links with hospitals including St George's, Kingston, Royal Marsden and University Hospital Lewisham, and with major community pharmacists, mean that our students can benefit from first-hand experience through visits and placements, as well as the opportunity to carry out their research project in industry.

### Search and Rescue Assistance in Disasters (SARAID) and Surrey County Council Emergency Planning Unit

Strong links with industry and practitioners in the emergency and disaster management field, including SARAID and Surrey County Council's Emergency Planning Unit, ensure that our Hazards & Disaster Management course covers the latest developments, with students learning directly from those working at the frontline in the industry.

## Professional bodies

Many organisations look for employees with qualifications that are accredited or recognised by the relevant professional bodies.

### BCS – the Chartered Institute for IT

We are a long-time member of the BCS. With many of our computing courses being accredited by the BCS, you can be sure that they are thoroughly vetted to meet the latest criteria. It also means that students can gain some exemption against BCS professional examinations, leading to Chartered membership and CEng, IEng or CSci status.

### Cisco, Microsoft and Apple

We are an accredited provider of professional vendor qualifications, offering established Cisco CNNA, Microsoft MCITP and Apple Professional courses.

### Engineering Council (UK-SPEC)

As the UK regulatory body for the engineering profession, the Engineering Council sets and maintains internationally recognised standards of professional competence and ethics.

Many of our engineering courses are designed to satisfy the Engineering Council's UK Standard for Professional Engineering Competence (UK-SPEC) as a 'period of further learning', helping you take that crucial step closer to registration as a chartered engineer (CEng). To find out more about the benefits of gaining CEng status, see [www.engc.org.uk/benefits.aspx](http://www.engc.org.uk/benefits.aspx)

#### ESRI (Development Centre Status)

Kingston University is one of only two universities outside of North America to be awarded Esri Development Centre status. The Esri Development Center (EDC) programme provides recognition and special status to university departments that have exemplary programmes focused on educating students to design and develop GIS applications using Esri's ArcGIS for Desktop or server technology. Students enrolled on EDC programmes will be given special access to Esri software and have opportunities to be recognised for their accomplishments.

#### Institute of Biomedical Science

Our Biomedical Science course is accredited by the Institute of Biomedical Science (IBMS) – the professional body for those who work within the field of biomedical science. The IBMS's programme of accreditation plays a key role in the education of biomedical scientists and helps to ensure that students are suitably trained upon entering the profession.

#### Institution of Mechanical Engineers

The Institution of Mechanical Engineers (IMechE) is the fastest growing professional engineering institution in the UK. It aims to find and nurture new talent, helping engineers build their careers and take on challenges. Programmes accredited by IMechE as leading towards CEng or IEng registration will increase your employability and demonstrate to others that you uphold the highest standards of engineering.

#### Institution of Engineering and Technology

The Institution of Engineering and Technology (IET) is one of the world's leading professional societies for the engineering and technology community. Accreditation from the IET ensures that the courses meet the needs of industry and demonstrate our commitment to developing and maintaining standards.

#### Joint Board of Moderators

The Joint Board of Moderators (JBM) incorporates the Institution of Civil Engineers, Institution of Structural Engineers, the Chartered Institution of Highways and Transportation, and the Institute of Highway Incorporated Engineers. A JBM-accredited course provides assurance that it meets the quality standards established by the profession.

#### Royal Pharmaceutical Society of Great Britain

Courses that are accredited by the Royal Pharmaceutical Society of Great Britain (RPSGB) ensure that they meet high standards for quality, promote best practice and provide effective resources to enable pharmacists and other healthcare professionals to develop their practice and improve patient care.

# Working together

Collaborations with large multinational corporations, small businesses and the not-for-profit sector enable us not only to shape, inform and evaluate what we do, but also to provide you with the opportunity to visit companies in the field and carry out projects with industry.

I spent three months at GSK on a work placement, working as a development scientist for the New Product Development Aquafresh team. During my placement I carried out a method development and validation of a calorimetric technique to study the reaction between hydroxyapatite (HAP) and sodium fluoride. I also regularly assisted in the dispensing of raw materials and manufacture of toothpastes in the laboratory, which allowed me to apply good laboratory practice and work in an accredited laboratory environment. Overall, the placement allowed me to gain invaluable experience for a global organisation that I can put on my CV as work experience, which automatically makes me more employable.

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Dora Namyalo, MSc Analytical Chemistry

In Engineering they try to conduct as many field trips as they can to have you in the field. Recently we had a trip to Airbus in Bristol where we learnt a lot about the methods of production and systems applied there, and met a lot of their managers. Other majors like motorsports have trips to Lotus and places like that. It's interesting to get an actual feel of what you are studying – it's not just academic, it's academic plus practical.

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Abdulla, MSc Engineering Projects & Systems Management

There were two field trips during my study. The first one was to LGC lab, which is one of the leading labs in analysis in the UK and also in Europe. The second trip was to Fisher scientific exhibition. In this trip I had the chance to have a look at the new technology and new instruments that are used in analysis.

---

Ali Athab Alkinani, MSc Pharmaceutical Analysis







# Expert opinion

The combination of knowledgeable academics and expert practitioners at the University gives Kingston a uniquely dynamic environment in which to further your studies and your career.

## Be inspired

Not only do you have the opportunity to learn from industry experts as part of your course, but we also hold a number of additional conferences, events, lectures and workshops that you can get involved with. Often they are linked to specific fields, but usually they're open to all students, enabling you to learn from expert practitioners from industry and invited academics from other leading universities, as well as drawing on the talent, experience and knowledge of our in-house experts.

These events encourage debate, enable you to share ideas and will inspire your studies.

## On course with industry experts

To ensure that your course is commercially relevant, we invite experts from the cutting-edge of industry to teach modules and lectures, adding an extra dimension to your studies. Here are a few examples.

### The low-down from Pfizer

With more than 10 years of working in various roles with leading pharmaceutical company Pfizer, including responsibility for the development and delivery of their good manufacturing practice (GMP) learning interventions, Mick Hopper visited the University to offer our pharmaceutical science students an insight into the quality assurance and accreditation procedures that are vital in the pharmaceutical industry.

### Forensic evidence from an expert witness

Guest lecturer Professor Ron Denney, who is considered to be one of the country's leading authorities on the subject of drinking and driving, has been captivating students with his specialist knowledge in the areas of alcohol, drugs, dangerous chemicals and DNA interpretation. Professor Denney is frequently called to give evidence in court as an expert witness in various cases involving the abuse of alcohol or drugs, and has been involved in several major trials concerning the synthesis of illegal drugs. Professor Denney, who runs his own business as a forensic scientist and industrial consultant, has also donated a breathalyser machine to the University.

### The role of GIS in conservation planning

Students in the School of Geography, Geology and the Environment had the opportunity to gain an insight into protected area network design and the use of systematic conservation planning software from Dr Bob Smith, a leading expert in this area. Dr Smith has been working with the Government of Mozambique to produce planning systems for Transfrontier Conservation Areas in the region, which involved developing Conservation Land-Use Zoning software (CLUZ) – an ArcView GIS interface that allows users to design protected area networks and conservation landscapes. Dr Smith is also interested in the role of marketing in driving conservation policy and practice.

### Pharmacy in practice

Students on our Overseas Pharmacists Assessment Programme (OSPAP) have been finding out more about pharmaceuticals from Chief Pharmacist Ian Costello, Pharmacy Audit and Clinical Information Co-ordinator Marissa Tozzi and Lead Antimicrobial Pharmacist Lillian Li, who are all from the Royal Marsden hospital, and gave talks about drug pharmacokinetics in children, medicine information and the use of antimicrobials, respectively. The students also heard from Jessica Clements, Lead Pharmacist HIV and Sexual Health for Imperial College Healthcare NHS Trust, who spoke about independent pharmacist prescribing; and from Diane Leakey, Head of Information at the Medicines and Healthcare Products Regulatory Authority (MHRA), who talked about the role of the MHRA.



**Brendan Brophy** (pictured) is associate director at Atkins, one of the world's leading engineering and design consultancies, which has been chosen as the

engineering design expert behind the London 2012 Olympic Games and is a big employer of our civil engineering and construction graduates.

As well as being an active member of our Industrial Advisory Board, which ensures that our courses are kept up to date, Brendan shares his wealth of experience as a structural engineer – whose accolades include the design and construction of the second tallest building in Dubai – by contributing to lectures and tutorials on

subjects such as professional practice, structures and group design. In addition, Brendan also gives up his time to coach students in applying for jobs and preparing for interviews.

Brendan's close association with Atkins also enables us to invite guest speakers to the University to offer an insight into how they plan, design and enable solutions for their clients, whether they are a concept for a new skyscraper, the upgrade of a rail network, the modelling of a flood defence system or the improvement of a management process.

In recognition of his ongoing contribution to Kingston University, Brendan was recently awarded an Honorary Doctorate from the University.



Students on the MSc Biomedical Science and MSc Cancer Biology courses recently benefitted from the insights of visiting lecturer **Stephen Snewin** (pictured),

who discussed the principles and practice of laboratory management in today's healthcare environment.

As Divisional Manager at Imperial College Healthcare NHS Trust, which is one of the largest NHS trusts in the country and one of the UK's first academic health science centres (AHSCs), Stephen has extensive experience of managing their clinical biochemistry laboratories, which offer an extensive range of analyses using state-of-the-art equipment.



### Lectures and events

The University hosts a number of lectures and events throughout the year. Here are a few examples.

#### Intelligent Transport – innovative solutions to keep people moving

Professor Brian Collins, Chief Scientific Advisor (CSA) to the UK Government's Department for Business, Innovation and Skills and CSA at the Department for Transport, gave the Annual Industrial Lecture in March 2011. During his talk on intelligent transport, Professor Collins examined opportunities for the use of integrated information and communications technologies in a range of mobility applications that just might keep people moving. He asked: "Can we maintain the individual freedom to travel that is now seen as a basic right of living in a developed society?" Professor Collins is also a member of our Industrial Advisory Panel.

#### Computer-Aided Diagnosis: Application to vascular imaging, colon and lung cancer

The 2011 Professorial Lecture was given by Professor Jamshid Dehmeshki, Professor of Medical Image Computing at Kingston University. The talk focused on the application of quantitative imaging in the analysis of vascular disease, colon and lung cancer. For vascular imaging, he discussed the tools used for automatic segmentation of the arterial system for extracting and quantifying aneurysm (or stenosis), and showed how they can help radiologists to analyse the risk of rupture and decide on suitable treatments. For colon and lung cancer, the talk illustrated how computer-aided diagnosis can improve both screening and diagnostic capabilities.

#### Enterprising Engineer

Aspiring engineering entrepreneurs were invited to hear tips from the experts about how to protect their ideas and start up a business. Suran Goonatillake (OBE), the co-founder of Bodymetrics, a company pioneering the use of body-scanning technologies in fashion, told of the hard lessons he had to learn on his way to success; while Dr Hiroko Onishi, Lecturer in Trademark Law and Copyright, explained how to obtain a patent.

## Our staff in the news

Our academics are often invited to offer their expert opinion on world events and cultural topics. Their research and activities are also reported widely in the media.



### Reporting on the Japanese tsunami

Dr Neil Thomas, course director for our Hazards & Disaster Management MSc, appeared on Sky News and BBC News commenting on the events of Japan's 8.9 magnitude earthquake and resultant tsunami as they developed.

Dr Thomas is an expert in the use of geophysical monitoring in risk assessment and disaster mitigation for earthquakes, volcanic hazards and tsunami. He has also gained extensive media coverage with his expert opinion on the Haiti earthquake and on Cyclone Yasi in Australia.

### The fight against drugs in sport

Professor Andrea Petroczi's latest research into how athletes try to cover up their use of performance-enhancing drugs has received extensive media coverage. Her team's work is providing ground-breaking insight into why athletes choose to take drugs. It is hoped the outcomes of the study will help contribute to the development of new anti-doping, preventative measures and, ultimately, put a stop to doping in sport.

### Researching foodstuffs

Kingston biochemist Professor Declan Naughton has been in the news quite often over the past few years, with newspapers and magazines reporting on the results of various research projects he has carried out. One project, undertaken in collaboration with Neal's Yard Remedies, showed that white tea has anti-ageing properties and high levels of antioxidants that could prevent cancer and heart disease, reported in the *Daily Mail* and *Times Higher Education*. Other projects, reported in publications including *The Guardian* and *Marie Claire* respectively, showed that many wines contain hazardous levels of metal, and that chemicals found in the skins of pomegranates could be harnessed to fight MRSA.

Professor Naughton, who is also chairman of a panel of independent experts appointed to assess the quality of the European Food Security Authority's scientific activities, has also been looking at using hair samples rather than urine in doping tests, the danger of ability-enhancing drugs, and work on a global food alert system that monitors contaminated food.

### Lean, green racing machine

Paul Brandon, senior lecturer in Motorsport and Motorcycle Engineering, led the University's zero-emission motorcycle racing team to a podium position in the 2011 Isle of Man SES TT Zero race. Named the 'lon Horse', the electric bike is the result of thousands of hours of work and is powered by electricity generated from the wind farms of their title sponsor – Ecotricity. The team's third-place achievement, reaching speeds of 127mph and out-racing the BMW team, was covered extensively in the specialist media.

### Can flu be eradicated?

Professor Mark Fielder, a medical microbiologist from the School of Life Sciences, received national and international coverage when he was invited to comment on Oxford University's development of a universal flu vaccine early in 2011.

Professor Fielder was asked for his reaction to the discovery in a lead article in *The Guardian*, which was then posted on *The Guardian's* website and promptly picked up by *The Telegraph*, *Daily Mail*, *Scottish Daily Mail* and Irish broadcaster UTV. Sky News was also quick to tap into Professor Fielder's expertise, visiting the University's laboratories at Penrhyn Road to film him giving his opinion on the development, and talking about the work he does at Kingston focusing on controlling and containing disease.

Professor Fielder has also recently been called upon to provide his expert opinion and advice on the E. coli outbreak that occurred in Europe in June 2011. He appeared on BBC World Service's Newshour, BBC Radio 4's Today programme, Al Jazeera's televised Newshour bulletin, and on BBC regional radio stations across the country.

### The truth about forensic science

Forensic scientist Dr Sarah Gardner was interviewed in an article featured by Metro newspapers in New York, Paris, Montreal, Denmark and Mexico. In the interview she was asked to describe how forensic science differs from detective work and whether programmes like CSI are good or bad for the profession.

Dr Gardner also appeared alongside her colleague Dr Gillian Lambe on a video filmed for the 'Inside Science' series, which are used as teaching aids in schools across England. The film includes details of real murder investigations, with Drs Gardner and Lambe explaining the chemistry behind the forensic testing that helped solve the cases.

### Paving the way for better town-centre navigation

Nigel Walford, Professor of Applied Geographical Information Systems, has been making headlines in the specialist press with news of his hand-held navigational system that can help people find their way around towns and city centres more easily. The device highlights areas, such as stairs or narrow pavements, that might cause difficulties to someone with disabilities, to older people or to anyone who might want to avoid streets that might prove difficult to navigate. It could also help users find services such as public toilets or children's play areas.

### Prehistoric find makes *National Geographic* top 10

A prehistoric complex containing two huge 6,000-year-old tombs, revealed by Kingston archaeologist Dr Helen Wickstead and her team, was one of only two UK discoveries to feature in the *National Geographic's* prestigious top 10 archaeology finds of 2009. Revealed in 2010, the leading scientific magazine ranked Dr Wickstead's find at number six. The original find was extensively featured in the specialist press and by Fox News, BBC News and *The Times*.

More recently, Dr Wickstead led a team of Kingston University students and schoolgirls from a local school in a scientific survey of the grounds of Kingston's historic All Saints church, which is widely believed to be the site of the crowning of at least two Anglo-Saxon kings.



# Study environment

Our courses are based primarily at the University's main Penrhyn Road campus and at the purpose-built engineering campus at Roehampton Vale, with our digital media courses taught in collaboration with the faculties of Art, Design & Architecture and Arts and Social Sciences on the Knights Park campus. Each campus has its own unique character.

The Penrhyn Road and Knights Park campuses are within walking distance of the town centre, while the Roehampton Vale campus is a few miles away, close to Richmond Park. A University bus service operates Monday to Friday during term time, linking all the campuses, our mains halls of residence and the town centre.



### Learning Resources Centres (LRCs)

Each campus has its own LRC, which holds learning resources relevant to the courses taught on that campus and provides zoned study areas with clusters of PCs and wireless connectivity for laptop use, including free internet and email access. The larger LRCs also contain learning cafes. Help and information is available during core hours from Help Desks.

Our LRCs are open until 9pm on most weekdays, with 24-hour opening during key teaching weeks at Penrhyn Road. Weekend opening hours vary. For full details, see [www.kingston.ac.uk/library](http://www.kingston.ac.uk/library)

### Graduate Centre

Our Graduate Centres provide postgraduate students with dedicated space for private study, meetings and seminars, computing facilities and a social area for relaxing.

Postgraduate students can also mix with staff in the restaurant area (the Picton Room) at the Penrhyn Road campus.

### Student support

To ensure that you receive appropriate advice regarding your academic development, we will allocate you a personal tutor on your arrival at Kingston. In addition, all students are offered extra training sessions on skills such as project management, communication and information research and retrieval.

You will also have access to the Careers and Employability Service, which provides friendly and high-quality careers and recruitment guidance, including advice and sessions on job-seeking skills such as CV preparation, application forms and interview techniques.

Additional facilities you will have access to are the University's health and counselling services, as well as the Fitness Centre and Students' Union sports and social clubs. The University also runs a nursery for children between the ages of two and five years.

See [www.kingston.ac.uk/pgsupport](http://www.kingston.ac.uk/pgsupport) to find out more, including accommodation options.

**Kingston University has a number of job fairs for students throughout the year for part-time, summer internship and full-time jobs. They also advise on CV writing and other attributes needed to get a job.**

**Reema Patel, Network and Information Security with Management Studies MSc**



### Penrhyn Road campus

Science, computing and mathematics, and civil and construction engineering students are based at Penrhyn Road.

The hub of student activity in Kingston, students from all campuses converge on this large complex, which is also home to the Fitness Centre, Health Centre, main student restaurant and Students' Union. Cooper House, the base for services such as accommodation and finance, is also nearby.

At the heart of the campus is the new John Galsworthy Building and landscaped courtyard.



### Roehampton Vale campus

Roehampton Vale is a modern building located on the outskirts of Kingston and has recently been extended to provide additional space for up-to-the-minute technology. Its top-quality facilities, designed exclusively for engineering students, provide important vocational experience. A new LRC (Sir Sydney Camm Centre) has also recently opened.



### Knights Park campus

Knights Park is our arts campus and is situated on the river Hogsmill, with its restaurant and bar opening on to the waterside. It's a relatively small campus and has a relaxed and friendly atmosphere. The riverside setting provides an appropriately picturesque backdrop for the University's design students.

## Visit online

To find out more about our campuses and to take a virtual tour of the sites, visit [www.kingston.ac.uk/pgcampuses](http://www.kingston.ac.uk/pgcampuses)

# Flexible study

We know that postgraduate study is a major commitment and we want you to succeed. That's why we aim to provide you with a programme that suits you and takes into account your work and life commitments. Our postgraduate courses are designed to allow maximum flexibility by offering you part-time options and the opportunity to complement and reinforce your study with learning in the workplace. You could also consider our Masters by Learning Agreement, a work-based programme that enables you to tailor your studies to your business needs.

## Full-time or part-time?

The study commitment varies depending on which course you take, with many of our courses available for part-time evening or afternoon/evening study or week-long blocks, and some on an open-learning weekend attendance basis.

Each course entry in this booklet includes a symbol (see right) that indicates whether it is available in full-time mode or part-time mode, or both. For additional information about attendance, visit the course webpage.

## Online learning

Online study is a key element of many of our courses. You will have access to StudySpace, the University's online learning tool, which is designed to give you the flexibility to choose where and when you study, as long as you have internet access.

StudySpace provides access to course materials, such as lecture notes and presentations, and also allows you to interact with staff and other students through online chatrooms and bulletin boards for each module. There are multimedia features too – for example, audio-visual lectures and tutorials, and videos of laboratory simulations. You can also submit your assignments online.

Our Learning Resources Centres (LRCs) enable you to carry out research online by accessing the many electronic books and journals available. But if you need to visit the library in person, the LRC at Penrhyn Road is open 24 hours during term time, allowing you to fit your studies around your other commitments.

## Virtual learning environment

We have also developed a comprehensive virtual learning environment in Second Life, the 3D digital online world. Leading the way is the School of Computing and Information Systems, whose region, solipCISM has two lecture theatres, a library, bookshop, research zone, teaching resources and in-world tools, an exhibition area for student work and a Virtual Life Research Centre.

With the recent addition of the Knowledge Zone region, the University now has two virtual campuses, enabling us to run classes and even entire modules in Second Life.

## Work-based learning programme

The working environment holds many learning opportunities. Kingston's work-based learning programme provides the opportunity for professionals to gain academic recognition for learning gained at work.

Our flexible 'learning agreement' framework enables you to tailor the programme around your work and organisation. It aims to make sure that the knowledge you gain is relevant to both your individual and organisation's needs.

You gain academic credit through recognition of the learning involved in completing work-based projects, and you will gain a qualification for the contribution you make to your organisation's success.

For more information, visit [www.kingston.ac.uk/workbasedlearning](http://www.kingston.ac.uk/workbasedlearning)

## How long is each course?

Unless otherwise stated, courses usually run for the following duration.

**FT** Full-time: 1 year

Full-time study can range from three to five days' per week attendance, supplemented by your own study.

**PT** Part-time: 2 years

Part-time study often takes place at weekends or in the evenings, or in week-long blocks.

**For full details, please see the course webpage.**







# Kingston, London

**Close to central London, Kingston is a beautiful place to study.**

Kingston upon Thames is located on the south-west edge of London, around 12 miles (19km) from Trafalgar Square.

Although part of Greater London, Kingston is a thriving town in its own right, packed with historic buildings, great shops, leisure venues and open spaces. Situated by the river Thames and close to Richmond and Bushy Parks, Kingston is one of the Capital's most attractive areas; it's also one of the safest.

With London's city centre only 25 minutes away by train, you don't have far to travel to access one of the greatest concentrations of resources in the UK, HQs of professional bodies and many established companies.

To find out more about Kingston upon Thames, visit [www.kingstonfirst.co.uk](http://www.kingstonfirst.co.uk)

## Travelling to Kingston

Getting to Kingston University is easy, wherever you live. Situated just off the M25, serviced by both Kingston and Surbiton train stations and on many bus routes, Kingston is easily accessible whichever mode of transport you choose. Heathrow and Gatwick airports are just a short distance away too.

For details on how to get to Kingston, see page 66 or visit [www.kingston.ac.uk/directions](http://www.kingston.ac.uk/directions)



# International students

Kingston University welcomes students from 151 countries all over the world. We offer a range of support services specifically for international students, designed to ensure that you feel at home in our vibrant, multicultural community.



**On your arrival**

Our International team will help you adapt to your new life in the UK by meeting you at the airport and showing you around the University and the local area. You will also have the opportunity to meet staff and other international students at our welcome and orientation events. In addition, we run social events for international students throughout the year.

If you have any problems, our International Student Advisors are available to help you.

**English language**

If your first language is not English, you will need to demonstrate a good standard of written and spoken English as an entry requirement onto our postgraduate courses (see your course webpage for details). However, before the start of the academic year (ie September), we offer a pre-sessional English course to help you develop the language skills you will need for postgraduate study – see [www.kingston.ac.uk/presessional](http://www.kingston.ac.uk/presessional).

Once you start your postgraduate studies, you can join the University's free English Language Development Programme to improve your English language skills.

**Pre-masters programme**

If you do not meet the entry requirements for a masters degree at Kingston, or would like to refresh your knowledge, our specialist pre-masters programme, designed especially for international students, will give you the skills, knowledge and confidence to succeed in your postgraduate studies.

Taught over two or three terms, the pre-masters combines academic subjects, study skills and English language training. Once you have successfully completed the course, you can then proceed directly on to your chosen masters programme. Visit [www.kingston.ac.uk/premasters](http://www.kingston.ac.uk/premasters) to find out more.

**Accommodation**

International (non-EU) students who apply for halls accommodation in good time are guaranteed an offer of accommodation for our halls of residence during their first year (providing they meet our eligibility criteria). For more details, see [www.kingston.ac.uk/pgaccommodation](http://www.kingston.ac.uk/pgaccommodation)

**Scholarships**

We offer a large number of postgraduate scholarships for international students each year. See [www.kingston.ac.uk/scholarships](http://www.kingston.ac.uk/scholarships) for details.

**Working in the UK after your studies**

International students who have successfully completed their studies may be able to work in the UK. For details, visit:

- [www.ukba.homeoffice.gov.uk/workingintheuk](http://www.ukba.homeoffice.gov.uk/workingintheuk)
- [www.ukcisa.org.uk/student/working\\_after.php](http://www.ukcisa.org.uk/student/working_after.php)
- [www.educationuk.org](http://www.educationuk.org) (for the guide 'Find your way to work')

**Find out more**

To find out more about what to expect as an international student at Kingston University, and to download our *International Student Guide*, visit [www.kingston.ac.uk/international](http://www.kingston.ac.uk/international)

When I landed in the UK I was worried because it was the first time I came to the UK, but I had the meet-and-greet service from Kingston University. Someone came and picked me up from the arrival zone; they brought me to my room and I got settled straight away.

They helped me open a bank account; they helped me get a good place to stay.

They organised a tour of London, so we went around London to see how we could travel, saw the attractions in London. And you really just go straight into the routine life of living in London. It was fantastic.

The International Student Union organises a lot of events; a lot of functions you can participate in.

**i** Watch our video on YouTube to find out more about what our international postgraduate computing students have to say about studying at Kingston University. [www.youtube.com/watch?v=Y-4ciD4mlkk](http://www.youtube.com/watch?v=Y-4ciD4mlkk)

# Research success

Kingston has received a three-fold increase in research funding from HEFCE as a result of the latest Research Assessment Exercise – putting the University on an equal level with the most research-active new universities.

## Strong research culture

Our reputation for high-quality, innovative research has developed rapidly over the past few years as a result of the significant investment we have made in this area – and it continues to grow.

We have consolidated our research strengths through the creation of centres of research excellence and are committed to providing a supportive environment for research and to the encouragement of a pervasive research culture. We have a growing number of active international collaborations, and our expanding community of home and international research students contributes significantly to our success.

## RAE results

The Government's Research Assessment Exercise (RAE) rates the quality of all research in UK universities. The latest assessment (2008) identified quality of at least an internationally recognised standard in 70% of Kingston University's research submissions. This assessment has meant the University's research grant from the Higher Education Funding Council for England (HEFCE) has nearly tripled.

Under the RAE's rating system, 12 of the 18 units submitted by the University achieved between five and 15 per cent at 4\*, denoting world-leading research; 30 per cent of activity is now rated 4\* and 3\*; 10 units achieved a grade point average of 2\* and above; and all 18 units achieved a minimum of 10 per cent of 3\* research.

## International reputation attracts worldwide funding

The excellent quality of research produced is also reflected in the international reputations of staff through papers published in refereed journals as well as prize-winning conference papers, and in the substantial external funding from both private- and public-sector sponsors. These include BAE Systems, the Leverhulme Trust, the European Space Agency, UNESCO, Transport for London, Statoil, the European Commission and the Engineering and Physical Sciences Research Council, among others.

## Centres of Research Excellence

The University's centres of research excellence provide a stimulating and supportive environment that nurtures the highest quality research. Each centre acts as a hub for researchers, ensuring a dynamic, sustainable research base and active knowledge sharing.

The Faculty of Science, Engineering and Computing is home to a number of these centres of excellence.

- **Centre for Earth and Environmental Science Research (CEESR)**  
Research in geography, environmental studies/science and earth sciences are co-ordinated through CEESR, which has three major groups: Agriculture, Environment and People (AEP); Environmental Change (EC); Geodynamics and Crustal Processes (GCP).
- **Centre for Fire and Explosion Studies (CFES)**  
The CFES is recognised globally for its work in the development and application of advanced fluid dynamics models for fire and explosion studies.

- **Digital Imaging Research Centre (DIRC)**  
DIRC is one of the largest computer vision groups in the UK, with internationally recognised expertise in visual surveillance, medical imaging and intelligent environments. In addition, DIRC's Visual Surveillance Research Group is recognised as a leading centre for intelligent visual surveillance research in the UK.
- **Materials Research Centre (MATRC)**  
The Materials Research Centre comprises three research groups: Theoretical and Applied Mechanics; Molecular Electronics and Photonics; and Constructional Materials and Sustainable Technology.
- **Mobile Information and Network Technologies Research Centre (MINT)**  
MINT focuses on emerging mobile communication and network technologies for medical applications and healthcare systems, and streaming of data over wireless communications systems.
- **Sustainable Technology Research Centre (STRC)**  
STRC is a multidisciplinary centre focusing on researching sustainable and cost-effective construction techniques, environmentally friendly sustainable construction materials, and the recycling of waste materials for reuse.

## Further information

To find out more about these research centres and the many others within the Faculty of Science, Engineering and Computing, visit [www.kingston.ac.uk/secresearch](http://www.kingston.ac.uk/secresearch)



Having completed an MSc in Aeronautical Engineering, a doctorate was the next logical step to progress and enhance my career.

Kingston had some really interesting research projects that would help me in the future, particularly in aerodynamics, as I aim to be in F1 as an aerodynamicist. It also has good funding for the doctorate programme. This, along with the fact that it is based in a really good location, made me decide on Kingston University.

The course, being a completely research-based course, requires me to work extremely hard. However, my supervisor has been extremely supportive and has been flexible enough to give me time to take up some other activities, like teaching and other skills management. A particular highlight of Kingston University is the excellent academic and support staff. They have helped me conduct my research with ease and have dealt with any problems that I have faced efficiently and quickly.

Although, as PhD students, we're not expected to attend lectures, we might occasionally be expected to deliver tutorials to undergraduate students. This has been a refreshing experience and gives an interesting perspective of being on the other side of the fence.

The most interesting part of the course is the new area of research that we are conducting our experiments in. It gives you the opportunity to try and innovate new methods for conducting experiments. Facilities at Kingston are also very good for researchers – we have access to a lot of journals through the online library.

Dinesh Bhatia  
PhD Aerospace Engineering

## Research degrees

### MSc by Research

The MSc by Research allows you to pursue an individual programme of research in any field. The degree involves investigation and evaluation of an approved research project and the presentation of a dissertation. The award of MSc by Research is at the same level as the MPhil, but carries half the credits.

The programme lasts one year full time or two years part time. To be eligible for the programme you need a good honours degree in a related discipline. Applications will also be considered from individuals with no formal qualifications (but with substantial relevant professional experience), providing they can satisfy the admissions tutor of their motivation and ability to work at MSc level.

### Master of Philosophy (MPhil)

Typically an MPhil takes about two years full time or three/four years part time. An MPhil thesis is 20,000 words long and is the subject of an oral examination in which you show how you have critically managed and investigated your area of research.

### Doctor of Philosophy (PhD)

Typically a PhD takes three to four years of full-time study or four to six years part time. To undertake a PhD, normally you are expected to have a masters degree or a first or upper-second-class honours degree or equivalent in a subject relevant to your proposed research programme. Your admission to study for a PhD will initially be provisional and subject to formal confirmation after your first year of study.

The PhD thesis is typically about 40,000 words long. On completion it will be the subject of an oral examination in which you will show how you have critically investigated your area of research and made an independent and original contribution to knowledge.

**i** See the University website for more information.

# Aerospace and Aircraft Engineering



The School of Aerospace and Aircraft Engineering is based at the well-equipped Roehampton Vale Campus. Its facilities include a large computational mechanics suite, two large wind tunnels, a composite material fabrication lab, a flight simulator, a live aircraft and materials testing equipment supplemented by a large and well-equipped workshop. The main areas of interest are computational fluid dynamics, structural dynamics, composite materials, low gravity fluid dynamics, solar and wind energy and aircraft maintenance.

The academic staff has a wide range of industrial experience in addition to their academic expertise.

Dr Peter Barrington, Head of School



## Aerospace Engineering PgDip/MSc

[www.kingston.ac.uk/pgaero](http://www.kingston.ac.uk/pgaero)

FT PT

This course, which has been designed to satisfy the requirements of the Engineering Council's UK Standard for Professional Engineering Competence (UK-SPEC), provides a strategic overview of aerospace engineering and management issues. It will help you to develop a wider perspective and understanding of the concerns facing the aerospace engineering industry, and includes subjects such as law, finance, risk assessment and green environmental issues.

### What you will study

You will study subjects that are both specific and complementary to aerospace engineering, such as further aerospace structures and materials, and computational fluid dynamics. You will develop your ability to resolve the broader problems that arise in aerospace engineering. In addition to improving your technical skills and knowledge, you will gain professional, analytical and management skills such as communication, teamwork, IT and problem-solving skills.

The MSc features an aerospace design project dissertation module, which is undertaken as part of a group and provides you with the challenge of solving a real-world problem in an engineering environment. You will also develop an awareness of what it's like to work in a multidisciplinary team within an engineering organisation and with real industrial constraints.

### Key features

- Throughout the course, academic teaching is complemented by visits from industry experts, keeping you up to date with the latest developments (see the course webpage to find out more).
- Four of the nine modules on this course are option modules, which will enable you to tailor the curriculum to your own interests or career aspirations.
- You can choose to study for a PgDip or MSc qualification, either full-time or part-time to fit in with work commitments. September and January start dates give you extra flexibility.
- You will learn real-world expertise through visiting lecturers from industry and the Aerospace Design Project Dissertation module (MSc students only), which may be taken in a business environment.
- Our aerospace engineering field (comprising aerospace, astronautics and aircraft engineering) is one of the largest and fastest expanding in the UK.

**i** See the course webpage for examples of our students' work.

## Aircraft Engineering PgDip/MSc

[www.kingston.ac.uk/pgaircraft](http://www.kingston.ac.uk/pgaircraft)

FT PT

This course is designed to enable aircraft engineers to take on a leadership role within the aircraft industry. It provides a strategic overview of aircraft engineering and management issues. A study of subjects such as law, finance, risk assessment, health and safety and environmental issues will also help to develop a wider perspective and understanding of the concerns facing the aircraft engineering industry.

The course assumes that applicants are familiar with working practices within the industry.

### What you will study

You will gain a broad understanding of the practical requirements of aircraft engineering, as well as knowledge of the subjects that are both specific and complementary to aerospace engineering, such as the role of the manager in aircraft maintenance activities and the role of financial accounting within organisations. You will also develop your ability to resolve the broader problems that arise in aircraft engineering, and will learn about management issues. In addition to improving your technical skills and knowledge, you will gain professional, analytical and management skills such as communication, teamwork, IT and problem-solving skills.

### Key features

- Modules are assessed with a view to improving your evaluation and project management skills in addition to enhancing skills in business and management.
- If you choose the MSc, your project allows you to build on your academic knowledge and extend your in-depth knowledge in your area of specialisation. It can be an excellent selling point when looking for a job or promotion.
- Academic teaching is complemented by visits from industry experts.
- The flexible, part-time delivery pattern is designed to allow students to complete the course while in full-time employment.

**i** See the course webpage to find out more about visits from industry experts.

“During the year I developed my CAD skills continuously and reached a level far beyond average by the end. The Integrated CAD/CAM led me to master other softwares, and the advanced CAD/CAM module gave me a vital introduction to CNC machine programming and injection mould design. Skills without which would seriously limit your appeal to engineering firms.”

Christopher Antrobus, MSc Aerospace Engineering

# Civil Engineering and Construction



Our fully accredited postgraduate programmes have been designed with your aspirations, needs and abilities in mind, and are aimed at developing your specialist skills, deepening your understanding and gaining new insights and perspectives to equip you for a professional career ahead.

The School has an interdisciplinary team of civil and structural engineers, material scientists, management experts, geologists and hydrologists. Many of our academic staff are recognised leaders in their areas of specialism and are frequently invited to undertake high-profile external research and consultancy works.

We have strong partnerships with different sectors of the industry, professional institutions and learned societies.

## Civil Engineering PgDip/MSc

[www.kingston.ac.uk/pgcivil](http://www.kingston.ac.uk/pgcivil)

FT PT

This industry-accredited course offers a strategic overview of civil engineering and management issues, as well as a wider perspective of the issues facing the construction industry. It will develop your professional, analytical and management skills, as well as improve your technical skills and knowledge. You will also study law, finance, risk assessment, health and safety and environmental issues.

### What you will study

This course comprises eight taught modules and a thesis. Six of the modules are intended to provide you with an understanding of the core management skills needed to make a major contribution within the industry; while two 'structures' modules enable you to broaden and deepen your technical knowledge of specialised civil engineering areas. You will also cover subjects that are both specific and complementary to civil engineering. In addition, you will develop the ability to resolve the broader problems that arise in civil engineering.

If you choose to study for the MSc award, you will carry out a major dissertation/thesis, which will develop your creative, analytical, organisational and presentation abilities, and will give you the opportunity to extend your in-depth knowledge in your area of specialisation.

### Key features

- This course is accredited by the Joint Board of Moderators, which comprises the Institution of Civil Engineers, the Institution of Structural Engineers, the Institution of Highways & Transportation and the Institute of Highway Incorporated Engineers. For further information, see [www.jbm.org.uk](http://www.jbm.org.uk)
- For students with a first degree that is accredited to CEng level, this course also satisfies the requirements of the Engineering Council's UK Standard for Professional Engineering Competence (UK-SPEC, previously known as SARTOR3) as a 'period of further learning' for registration as Chartered Engineer in the UK.
- Input from industry experts complements the academic teaching throughout the course.
- We have developed excellent industrial links over many years and throughout many countries. Examples include: Matra-Marconi Space Ltd, Ericsson, Balfour Beatty, The National Health Service and British Gas.
- You can choose to study this course full time or part time to fit in with work commitments. September and January start dates give you additional flexibility; plus the programme is modular, with the majority of the modules delivered over one week.
- Civil Engineering at Kingston was rated excellent for teaching in the *Sunday Times University Guide* 2010.

## Construction Management & Construction Law PgDip/MSc

[www.kingston.ac.uk/pgconstructmgtlaw](http://www.kingston.ac.uk/pgconstructmgtlaw)

PT

The varying and increasingly complex nature of the construction industry has led to a demand for professionals with the skills to analyse, manage and solve intricate problems that often arise on major projects. Designed to address this demand, this industry-accredited part-time course is particularly suitable if you have an interest in the commercial aspects of the construction industry and would like the confidence to operate in the difficult environment of contractual arrangements.

### What you will study

You will study the English legal systems, including contract law and tort law, and will gain an understanding of how design and construction work is priced and how to control these costs. You will learn how to analyse the rights and liabilities of the parties involved in the construction process, and how to manage dispute resolution. You will also develop a commercial awareness of inter-company relationships, as well as gaining a working knowledge of modern project management and risk management techniques in controlling construction and design work.

Your MSc research thesis will enable you to conduct a sustained, in-depth, original piece of research related to complex theoretical arguments within the field of the construction industry.

### Key features

- This is a career-enhancing course where academic teaching is complemented by experts from leading civil engineering and construction and associated companies, enabling you to develop a wider perspective and understanding of the worldwide issues facing the construction industry.
- This course is accredited by the Joint Board of Moderators, which comprises the Institution of Civil Engineers, the Institution of Structural Engineers, the Institution of Highways & Transportation and the Institute of Highway Incorporated Engineers. For further information, see [www.jbm.org.uk](http://www.jbm.org.uk)
- For students with a first degree that is accredited to CEng level, this course also satisfies the requirements of the Engineering Council's UK Standard for Professional Engineering Competence (UK-SPEC, previously known as SARTOR3) as a 'period of further learning' for registration as Chartered Engineer in the UK.
- Examples of positions undertaken by recent graduates include civil engineer, housing contracts manager, quality surveyor and transport consultant.
- Civil Engineering at Kingston was rated excellent for teaching in the *Sunday Times University Guide* 2010.

## Management in Construction PgDip/MSc

[www.kingston.ac.uk/pgmgtconstruct](http://www.kingston.ac.uk/pgmgtconstruct)

FT PT

This industry-accredited course aims to provide an in-depth understanding of construction management issues, helping you to operate more effectively when realising construction projects. With the construction industry becoming increasingly fragmented and operating within inter-company contractual relationships, the course covers the legal obligations and conditions of contract under which construction companies operate. It also looks at the science of procurement and the estimating process, as price is a major deciding factor in awarding contracts in this highly competitive industry.

### What you will study

You will gain an extensive knowledge of the legal and contractual systems relevant to the construction industry. You will also study how design and construction work is priced and how these prices are used to control the costs for the firms involved. You will analyse the systems that control the quality and safety of construction projects, and will gain a greater understanding of the relationships between the various contributing parties. Emphasis is placed on the use of case studies and teamworking.

The MSc research thesis enables you to conduct sustained, in-depth, original research related to complex theoretical arguments within the field of the construction industry.

### Key features

- This course is accredited by the Joint Board of Moderators, which comprises the Institution of Civil Engineers, the Institution of Structural Engineers, the Institution of Highways & Transportation and the Institute of Highway Incorporated Engineers. For further information, see [www.jbm.org.uk](http://www.jbm.org.uk)
- For students with a first degree that is accredited to CEng level, this course also satisfies the requirements of the Engineering Council's UK Standard for Professional Engineering Competence (UK-SPEC, previously known as SARTOR3) as a 'period of further learning' for registration as Chartered Engineer in the UK.
- This course will develop your professional, analytical and management skills, as well as improving your technical skills and knowledge; for example, you will gain communication, teamwork, IT and problem-solving skills.
- The optional European module gives you the chance to work in a multinational team and see how different European countries approach construction.
- You can choose to study this course full time or part time to fit in with work commitments. September and January start dates give you additional flexibility; plus the programme is modular, with the majority of the modules delivered over one week.
- Civil Engineering at Kingston was rated excellent for teaching in the *Sunday Times University Guide 2010*.

## Structural Design & Construction Management PgDip/MSc

[www.kingston.ac.uk/pgstructdesign](http://www.kingston.ac.uk/pgstructdesign)

FT PT

This industry-accredited course is particularly suitable to civil and/or structural engineers who aspire to become senior managers in both consulting engineering and contracting organisations. It successfully combines state-of-the-art construction management with advanced structural engineering, which will enable you to perform at a managerial level for a consultant or contractor.

### What you will study

You will learn how to carry out the conceptual and detailed design of standard and innovative structures and substructures under normal or earthquake actions using steel and concrete. You will also study the financial, legal and contractual problems associated with the construction process, and will learn how to apply your knowledge of management techniques and contract administration in the supervision of construction projects.

You will have the opportunity to carry out research and undertake industry-relevant dissertation projects.

### Key features

- This is a career-enhancing course where academic teaching is complemented by experts from leading civil/structural engineering consultants and construction companies, enabling you to develop a wider perspective and understanding of the worldwide issues facing the construction industry.
- This course is accredited by the Joint Board of Moderators, which comprises the Institution of Civil Engineers, the Institution of Structural Engineers, the Institution of Highways & Transportation and the Institute of Highway Incorporated Engineers. For further information, see [www.jbm.org.uk](http://www.jbm.org.uk)
- For students with a first degree that is accredited to CEng level, this course also satisfies the requirements of the Engineering Council's UK Standard for Professional Engineering Competence (UK-SPEC, previously known as SARTOR3) as a 'period of further learning' for registration as Chartered Engineer in the UK.
- The course will develop your professional, analytical and management skills, as well as improving your technical skills and knowledge; for example, you will gain communication, teamwork, IT and problem-solving skills.
- You can choose to study this course full time or part time to fit in with work commitments. September and January start dates give you additional flexibility; plus the programme is modular, with the majority of the modules delivered over one week.
- Civil Engineering at Kingston was rated excellent for teaching in the *Sunday Times University Guide 2010*.

## Sustainable Concrete Structures with Construction Management PgDip/MSc

[www.kingston.ac.uk/pgsustainableconcrete](http://www.kingston.ac.uk/pgsustainableconcrete)

FT PT

Developed in consultation with leading industrial specialists and delivered in association with The Concrete Centre UK ([www.concretecentre.com](http://www.concretecentre.com)), this industry-accredited course aims to offer sustainability expertise to practising construction/structural engineers. It is fully compatible with the Government and Foresight Strategy on Sustainable Construction.

### What you will study

This hands-on course focuses on the challenges and opportunities experienced by the concrete industry in meeting the demands of sustainable development. You will study sustainable concrete technology, advanced concrete framed structures and substructures, earthquake engineering and sustainable construction management. You will also have the opportunity to carry out research and undertake industry-relevant dissertation projects.

### Key features

- This course is accredited by the Joint Board of Moderators, which comprises the Institution of Civil Engineers, the Institution of Structural Engineers, the Institution of Highways & Transportation and the Institute of Highway Incorporated Engineers. For further information, see [www.jbm.org.uk](http://www.jbm.org.uk)
- For students with a first degree that is accredited to CEng level, this course also satisfies the requirements of the Engineering Council's UK Standard for Professional Engineering Competence (UK-SPEC, previously known as SARTOR3) as a 'period of further learning' for registration as Chartered Engineer in the UK.
- The course builds on the acknowledged research excellence in Sustainable Concrete Construction at Kingston University.
- Academic teaching on this career-enhancing course is complemented by experts from leading civil/structural engineering and construction and associated companies, enabling you to develop a wider perspective and understanding of the worldwide issues facing the construction industry.
- You can choose to study the course full time or part time to fit in with work commitments. September and January start dates give you additional flexibility; plus the programme is modular, with the majority of the modules delivered over one week.
- Civil Engineering at Kingston was rated excellent for teaching in the *Sunday Times University Guide* 2010.

# Computing and Information Systems



Computers, software and communication systems underpin the economies, governments, businesses and social life of the world. Here at Kingston we are training the people who make this happen, and conducting the research that drives the technological advances of the future.

Professor Tim Ellis, Acting Head of School

## Computer Vision & Image Analysis / with Management Studies MSc

[www.kingston.ac.uk/pgcomputervision](http://www.kingston.ac.uk/pgcomputervision)

[www.kingston.ac.uk/pgcomputervisionmgt](http://www.kingston.ac.uk/pgcomputervisionmgt)

FT PT

Computer vision and image analysis is a rapidly evolving field with a range of applications, eg traffic monitoring and control, robot assembly and security and surveillance. This course will equip you with the knowledge and skills to build a complete computer-vision system, exploring different imaging devices and acquisition techniques, and using the relevant image processing, feature extraction and pattern recognition algorithms.

You can combine this course with management studies, which will enable you to develop the skills to successfully lead teams and manage innovation.

### What you will study

The core modules cover the three elements of computer-vision systems: image acquisition (Imaging Devices module), image processing (Digital Imaging module) and image interpretation (Pattern Recognition and Neural Networks module). In addition, the Scientific Programming module will provide you with the tools and techniques to broaden your knowledge of numerical analysis techniques used for all three elements.

There is also an emphasis on advanced techniques from numerical analysis, applied mathematics (linear algebra, probability and statistics), industrial computer programming and software engineering for computer-vision systems.

If you choose the 'with Management Studies' route, modules in finance, managing operations, entrepreneurship and/or managing people and organisations will set your technical knowledge in a management context.

### Key features

- This course would be particularly attractive to those already in industry, wishing to advance their skills in this constantly evolving area.
- You can choose option modules from an extensive list, giving you a wide degree of choice in your studies.
- Kingston University is known as a centre of excellence in the field of computer vision and digital imaging; expertise from the University's Digital Imaging Research Centre informs our teaching and will expose you to leading-edge developments in the field.
- The course is continually updated with direct input from our industrial and business partners to ensure that it meets industry needs.
- September and January entry dates allow you to choose when you would like to start your studies.

**i** See the course webpage to find out more about the Digital Imaging Research Centre.

## Electronic Commerce / with Management Studies MSc

[www.kingston.ac.uk/pgecommerce](http://www.kingston.ac.uk/pgecommerce)

[www.kingston.ac.uk/pgecommercemgt](http://www.kingston.ac.uk/pgecommercemgt)

FT PT

Electronic commerce, or e-commerce, enables the management of vital flows of information within industry supply chains, as well as the selling of products and services within industry or to consumers. This course aims to provide you with the knowledge to design, develop and implement e-commerce applications and technologies. Its multidisciplinary and holistic approach places the applications and technologies of e-commerce into the wider business, social and economic context.

You can combine this course with management studies, which will enable you to develop the skills to successfully lead teams and manage innovation.

### What you will study

You will use advanced tools and techniques to analyse, design, implement and manage the use of e-commerce between businesses, consumers and government. You will investigate the design and management of e-commerce systems to show how e-commerce can accommodate the increased rate of change created by social, economic, political and technical developments, including legal and ethical considerations. You will also focus on the organisational and change management implications of new business models enabled by e-commerce. In addition, you will have the opportunity to carry out in-depth analysis of the impact of the internet in a variety of organised activity areas, such as business and administrative organisations and in society. A Research Methods module prepares you for work on your project/dissertation.

If you choose the 'with Management Studies' route, modules in finance, managing operations, entrepreneurship and/or managing people and organisations will set your technical knowledge in a management context.

### Key features

- This MSc is a career-enhancing programme designed to build on your previous experience and education, to improve your job performance and allow you to develop teamworking and leadership skills so that you can contribute to the knowledge base of your company.
- This course is accredited by the British Computer Society.
- The course content is continually updated with direct input from our industrial and business partners to ensure that it meets the needs of industry.
- September and January entry dates allow you to choose when you would like to start your studies.

## Embedded Systems / with Management Studies MSc

[www.kingston.ac.uk/pgembeddedsystems](http://www.kingston.ac.uk/pgembeddedsystems)

[www.kingston.ac.uk/pgembeddedsystemsmgt](http://www.kingston.ac.uk/pgembeddedsystemsmgt)

FT PT

Embedded systems combine computer hardware and software as part of a complete device, and control devices such as MP3 players, traffic lights, mobile phones and medical equipment. This course aims to provide you with the knowledge to conceive, design, implement and deploy dedicated embedded systems. Key aspects, such as digital signal processing/processors, control systems, microcontrollers, mechatronics, networks and digital media, are covered.

**You can combine this course with management studies, which will enable you to develop the skills to successfully lead teams and manage innovation.**

### What you will study

You will develop a disciplined approach to and sound practical skills in the specification, design, modelling and implementation of software for embedded systems. You will gain specialist knowledge in digital signal processing and processors, control systems, microcontrollers and research methods. You will then choose from a wide range of option modules encompassing computing, engineering and digital media processing. It may also be possible for you to undertake a 'real-world' project in an industrial placement or to work alongside our research teams (eg digital imaging, industrial control, aerospace, wireless multimedia and networking).

If you choose the 'with Management Studies' route, modules in finance, managing operations, entrepreneurship and/or managing people and organisations will set your technical knowledge in a management context.

### Key features

- You will be taught by experts from the fields of computing, engineering and science.
- The course's modular structure is ideal if you would like to take an industrial secondment.
- September and January entry dates allow you to choose when you would like to start your studies.

## Health Information Management MSc

[www.kingston.ac.uk/pghealthinfo](http://www.kingston.ac.uk/pghealthinfo)

FT PT

The effective use of health information systems has the potential to dramatically improve health services. This course aims to produce talented and visionary leaders to shape the future health information strategy and successfully lead health informatics projects and teams. Teaching focuses on the knowledge and skills that will be required by the NHS Information Strategy.

### What you will study

You will build management and leadership skills by studying the fundamental concepts and principles of health services quality, financial resource management, health information strategy, health information governance, systems analysis and design, and clinical data records. You will have the opportunity to improve your practical skills so that you can plan and manage complex health informatics projects and implement changes within the evolving healthcare environment. Throughout the course you will consider the impact of health information systems upon individuals and teams within the healthcare environment.

### Key features

- There is a strong demand for well-qualified information professionals in a wide range of health-related settings. Graduates of this course will be prepared for managerial positions in hospitals, practice management and primary care.
- Guest speakers from industry, such as chief executives from NHS trusts, ensure you keep up to date with the needs of the industry.
- The flexible modular programme can be studied full time or part time and is taught in partnership with Kingston Business School.
- September and January entry dates allow you to choose when you would like to start your studies.



## Informatics / with Management Studies MSc

[www.kingston.ac.uk/pginformatics](http://www.kingston.ac.uk/pginformatics)

[www.kingston.ac.uk/pginformaticsmt](http://www.kingston.ac.uk/pginformaticsmt)

**FT** **PT**

This MSc gives you maximum flexibility to design your own course, allowing you to choose a personal portfolio of modules from the full range of masters-level computing and information systems modules offered. This freedom of choice offers a more-vocational course, enabling you to tailor the content to meet your current and future educational and career needs.

You can combine this course with management studies, which will enable you to develop the skills to successfully lead teams and manage innovation.

### What you will study

You will choose a total of seven modules from the comprehensive range available – see the course webpage for the full list. Your choice of modules can be based on your current or future career requirements or may be chosen purely depending on your area of interest and/or expertise. You will also undertake the core module on Research Methods and learn about various investigative techniques.

If you choose the ‘with Management Studies’ route, modules in finance, managing operations, entrepreneurship and/or managing people and organisations will set your technical knowledge in a management context.

### Key features

- The project/dissertation gives you the chance to further specialise by studying in depth an area of interest that is relevant to your career, providing an excellent selling point when looking for a job or promotion.
- We offer a range of events and lectures to enhance your studies and add an extra perspective to your learning.
- September and January entry dates allow you to choose when you would like to start your studies.

**i** See the course webpage for more information about the events and lectures you can take advantage of.

## Information Management and Knowledge Sharing MSc

[www.kingston.ac.uk/pgimks](http://www.kingston.ac.uk/pgimks)

**FT** **PT**

Technology today makes it possible to generate endless data from every area of an organisation’s operations, often resulting in information overload. Unlocking the true value of this information is a real challenge facing information specialists.

This professional development course aims to provide you with the skills to help public-sector organisations distil real information from the mass of data available and, once they have that information, get full value from it.

### What you will study

You will gain the communication, presentation, literature search, problem analysis, project planning, report writing and solution justification skills to work with decision makers across an organisation, influencing and guiding them towards a better way of looking at information and knowledge. You will focus on the managerial, social and behavioural issues related to information and knowledge. You will cover everything from comparing the nature of information and knowledge assets with traditional resources, such as money, people and plant, through to designing and building an effective information governance regime and ultimately developing an information strategy. You will carry out an individual project, which enables you to investigate a theoretical area in depth or tackle a real-world problem.

### Key features

- This course places an emphasis on people skills in relation to information, rather than on the technology itself.
- The use of practical examples and the input of current practitioners will enable you to put the very latest thinking into practice in your workplace.
- This course has close links with the University’s Information and Knowledge Management (IMKS) Forum, which has been set up to enable staff in public-sector organisations to network and identify and share best practice in information management. The Forum has around 200 members from organisations such as Transport for London, Westminster City Council and Kent Council.
- To maximise success, introductory induction sessions are available to help those who have been out of formal education for some time.

“All the modules I’ve done have brought in people from industry – people who have literally driven that part of the industry; for example, people who actually formed the original Agile concept, and senior guys from Google talking about the future of where the web is going – all exceptionally useful.”

Pete Stevens, MSc Informatics

## Information Systems / with Management Studies MSc

[www.kingston.ac.uk/pginfosys](http://www.kingston.ac.uk/pginfosys)

[www.kingston.ac.uk/pginfosysmgt](http://www.kingston.ac.uk/pginfosysmgt)

FT PT

Information systems can improve competitiveness, transform businesses, restructure organisations and streamline business processes. This course seeks to address the shortage of people who can operate at the interface of business and IT, and offers the chance to study a spectrum of relevant business and technical subjects.

You can combine this course with management studies, which will enable you to develop the skills to successfully lead teams and manage innovation.

### What you will study

You will study the design and management of information systems to enable you to recognise and accommodate the increased rate of change and instability in the business and information environment created by social, economic, political and technical changes. You will gain an understanding of how information is used within an organisation, who uses it, the nature of the information, how it relates to decision making and how it contributes to organisational goals and objectives. Case studies and teamworking are emphasised throughout the course, and modules are regularly updated to ensure quality and relevance to industry. A Research Methods module will prepare you for work on your project/dissertation.

If you choose the 'with Management Studies' route, modules in finance, managing operations, entrepreneurship and/or managing people and organisations will set your technical knowledge in a management context.

### Key features

- This MSc Information Systems is accredited by the British Computer Society.
- This course is designed to allow you to tailor your learning to suit your individual career development, industry background and requirements of your business organisation.
- An Industrial Management Committee advises on all aspects of the curriculum to ensure that state-of-the-art concepts are introduced and that the course continues to meet the needs of business and industry.
- External lecturers who are experts in their field are brought in from industry to underpin the theoretical background of the modules and place them in their business context.
- September and January entry dates allow you to choose when you would like to start your studies.

## Intelligent Transport Systems and Services MSc

[www.kingston.ac.uk/pgtransportsystems](http://www.kingston.ac.uk/pgtransportsystems)

PT

This highly practical, professional development course is ideal for those wishing to develop their skills in the rapidly evolving science of transport management. It aims to provide contemporary knowledge and best practice for intelligent transport systems planners and suppliers, and their customers and clients, and will enable you to operate at the interface between intelligent transport systems and services (ITSS) technical development and the planning and management of ITSS.

### What you will study

This part-time course is highly practical and will feature real-world and work-based topics, examples and case studies.

You will study six core modules, choose from two elective modules and will study a topic of particular interest in more depth through your project dissertation.

You will gain a thorough understanding of intelligent transport systems and services, ranging from the technical knowledge necessary to plan, develop and deploy systems, to the political and strategic rationales involved. You will gain a broad overview of the information system infrastructures required by modern intelligent transport systems and services, and focus on intelligent transport systems and services in road and rail, and integration with other transport modes.

You will be encouraged to share your challenges and successes and learn from those experienced by your fellow students. Industry experts will also contribute to the course.

### Key features

- Our Industrial Advisory Panel has been closely involved in the development of this programme to ensure that it reflects current/future needs and best practice.
- The course is suitable for students from transport authorities and agencies, public and private operating companies (both passenger and freight), government departments, and engineering and systems consultancies. These could be managers and graduate transport strategists and planners, as well as systems architects, analysts and designers, and operational and maintenance specialists.
- Each of the modules on this part-time course is taught either in a week-long block or over a long weekend, and is supplemented with online teaching materials, pre-reading, preparation and coursework. This structure is designed to help you fit your studies around your work and other commitments. September and January start dates give you extra flexibility.

## IT & Strategic Innovation / with Management Studies MSc

[www.kingston.ac.uk/pgitstrategicinnovation](http://www.kingston.ac.uk/pgitstrategicinnovation)

[www.kingston.ac.uk/pgitstrategicinnovationmgt](http://www.kingston.ac.uk/pgitstrategicinnovationmgt)

FT PT

The success of an organisation can rest on both an understanding of IT and how to use innovation strategically to enable new growth and competitive advantages. This course aims to provide an understanding of the characteristics of high-tech innovation combined with the leadership and management values necessary for entrepreneurship or for successfully creating and managing strategic innovation within an organisation.

You can combine this course with management studies, which will enable you to develop the skills to lead and manage successful teams and projects.

### What you will study

You will study the types and characteristics of innovation, as well as the major barriers to the spread of innovation. This will enable you to recognise and welcome the increased rate of change and instability in the business and technology fields. You will gain an understanding of how innovation can be encouraged, captured and managed within an organisation; and how this relates to knowledge management, decision making, organisational goals and objectives. A Research Methods module prepares you for work on your project/dissertation, which often takes the form of a business plan.

If you choose the 'with Management Studies' route, modules in finance, managing operations, entrepreneurship and/or managing people and organisations will set your technical knowledge in a management context.

### Key features

- You can tailor the course to suit your own career development needs, industry background or organisation's requirements.
- Case studies and teamworking are emphasised throughout the course, and modules are regularly updated to ensure quality and relevance to industry.
- The project/dissertation gives you the chance to study an area of interest in greater depth and gain valuable research skills. It often takes the form of a business plan relevant to your career, and provides an excellent selling point when looking for a job or promotion. If you are an overseas student, we will help you to carry out a project either based in your home country or that will be of specific relevance when you return home.
- September and January entry dates allow you to choose when you would like to start your studies.

## Network & Information Security / with Management Studies MSc

[www.kingston.ac.uk/pgnetworkinformation](http://www.kingston.ac.uk/pgnetworkinformation)

[www.kingston.ac.uk/pgnetworkinformationmgt](http://www.kingston.ac.uk/pgnetworkinformationmgt)

FT PT

Computer network and information security is of increasing importance – new legislation, technologies, vulnerabilities and threats necessitate frequent system updates. This course aims to equip you with technical knowledge of current and emerging technologies and an understanding of the underlying theory of cryptography, networking and network security technologies. You will learn to assess, plan, design and develop secure and reliable networks and systems.

You can combine this course with management studies, which will enable you to develop the skills to successfully lead teams and manage innovation.

### What you will study

You will gain a critical awareness of the current developments and future trends in cryptography, network security and wireless security, starting from the mathematical principles behind cryptographic algorithms and moving up to secure network protocols. You will take part in laboratory exercises as much as possible, using and configuring the technologies presented and the tools to circumvent them.

As security and dependability are inextricably linked – core concepts in secure systems cannot be implemented if they are not dependable and reliable – the course also covers dependable and highly available architectures. Techniques and technologies to combat threats will be explored, from secure authentication mechanisms, through firewalls, to information policies and user education to combat social engineering and data leakage. Security vulnerabilities in wireless networks and systems will also be addressed.

If you choose the 'with Management Studies' route, modules in finance, managing operations, entrepreneurship and/or managing people and organisations will set your technical knowledge in a management context.

### Key features

- Many companies are actively recruiting security specialists. This course will prepare graduates for senior technical and management positions in many industry sectors.
- The course is taught in a specialist data communications lab with access to the latest networking and security equipment from vendors such as Cisco, Microsoft, Clavister. Current and emerging technology will also be demonstrated by representatives from industry.
- You will have the option to work in one of our state-of-the-art research labs, called WMN (Wireless Multimedia and Networking). WMN is involved in EU and UK research collaborations and offers opportunities for advanced research and short-term research fellowships on completion of your MSc degree.
- Students can access 'Cisco Network Academy' material. This is an optional extra to the masters course.

## Networking & Data Communications / Software Engineering / with Management Studies MSc

[www.kingston.ac.uk/pgnetdatacomm](http://www.kingston.ac.uk/pgnetdatacomm)

[www.kingston.ac.uk/pgnetdatacommgmt](http://www.kingston.ac.uk/pgnetdatacommgmt)

FT PT

This course aims to provide the knowledge and skills required to design, model and effectively operate secure and dependable digital IP-based networks. It will provide you with the opportunity to gain a sound understanding of the internet protocol suite that will form the core for future data networks. The fusion of the internet world and wireless is also addressed.

You can combine this course with management studies, which will enable you to develop the skills to successfully lead teams and manage innovation.

### What you will study

Using the latest methods and conforming to current network design standards, you will develop a disciplined engineering approach to, and sound practical skills in, the specification, design, modelling and implementation of software and hardware. You will gain specialist knowledge of digital communications principles, multimedia communications principles, wireless networks, security issues and other advanced technologies. You will have access to a dedicated test LAN/ WLAN with a diverse range of platforms and equipment, including wireless networks and enterprise scale networking technologies. In addition, it may be possible for you to gain an industrial placement and undertake a 'real-world' project or become involved with networking and communication research.

If you choose the 'with Management Studies' route, modules in finance, managing operations, entrepreneurship and/or managing people and organisations will set your technical knowledge in a management context.

### Key features

- This course is accredited by the British Computer Society.
- You will have the opportunity to study for industry certification, including CISCO, as an optional extra to the masters programme.
- You will have the option to work in one of our state-of-the-art research labs, called WMN (Wireless Multimedia and Networking). WMN is involved in EU and UK research collaborations and offers opportunities for advanced research and short-term research fellowships on completion of your MSc degree.
- By choosing particular option modules, you can specialise in network design, network security or wireless networks.
- An active Industrial Committee ensures the course content is highly relevant to the industry's current needs.

[www.kingston.ac.uk/pgsofteng](http://www.kingston.ac.uk/pgsofteng)

[www.kingston.ac.uk/pgsoftenggmt](http://www.kingston.ac.uk/pgsoftenggmt)

FT PT

Some of the most challenging problems in industry and commerce are associated with software development. This course will equip computing professionals with advanced knowledge of the latest methods and tools in software engineering, as well as practical skills in software development.

You can combine this course with management studies, which will enable you to develop the skills to successfully lead teams and manage innovation.

### What you will study

You will study state-of-the-art concepts in software engineering and will focus on the fundamental concepts and principles of systems analysis, design, implementation and testing. You will also have an opportunity to improve your practical skills so that you can plan and conduct complex systems development projects to meet customer needs and integrate software solutions into an evolving business environment. Throughout the course, you will consider the impact of computer systems upon individuals, organisations and the wider community.

The Research Methods module will prepare you for work on your project/dissertation, which is 'design and build' in type, often in association with an industrial host, and includes a research element.

If you choose the 'with Management Studies' route, modules in finance, managing operations, entrepreneurship and/or managing people and organisations will set your technical knowledge in a management context.

### Key features

- This course is accredited by the British Computer Society.
- The knowledge and skills learnt on this course will enable you to make an effective contribution as part of a team building software systems, delivering optimum results in terms of cost, time and software quality.
- The dissertation project gives you the chance to study an area of interest in greater depth. It can be undertaken in industry, giving you valuable industrial experience and an excellent talking point when you are looking for a job or promotion.
- September and January entry dates allow you to choose when you would like to start your studies.

**i** Visit the course webpage for examples of our students' work.

**“Kingston has good links with industry and we met external engineers and researchers who gave us a good insight into the latest developments.”**

Arvind Ramrekha, MSc Networking & Data Communications graduate, now a PhD student at Kingston

## Web Development / with Management Studies MSc

[www.kingston.ac.uk/pgwebdev](http://www.kingston.ac.uk/pgwebdev)

[www.kingston.ac.uk/pgwebdevmgt](http://www.kingston.ac.uk/pgwebdevmgt)

FT PT

Many businesses are now using the web in rapidly changing and increasingly complex ways. This MSc will equip you with the appropriate business, technical and personal skills to design and develop complex web systems, as well as to integrate them into industry and business environments.

You can combine this course with management studies, which will enable you to develop the skills to successfully lead teams and manage innovation.

### What you will study

You will gain highly employable web development skills through modules that cover the latest industry technologies for developing enterprise web applications. You will study techniques for designing and developing bespoke products that support business objectives and add value for both small and large businesses. You will look at the ethical, legal and professional issues in the development of enterprise web systems, and apply tools and techniques to design e-business architectures. You may choose to learn how to specify and design identity management and security requirements for the web. By looking at the design and management of information systems, you will be able to recognise and accommodate the challenges created by social, economic, political and technical changes.

The Research Methods module will prepare you for work on your project/dissertation, which is 'design and build' in type, often in association with an industrial host, and includes a research element.

If you choose the 'with Management Studies' route, modules in finance, managing operations, entrepreneurship and/or managing people and organisations will set your technical knowledge in a management context.

### Key features

- This MSc is accredited by the British Computer Society.
- To ensure that the curriculum is relevant and up to date, the academic teaching on this career-enhancing course is complemented by visiting industry experts.
- The dissertation project gives you the chance to study an area of interest in greater depth. It can be undertaken in industry, giving you valuable industrial experience and an excellent talking point when you are looking for a job or promotion.
- September and January entry dates allow you to choose when you would like to start your studies.

## Wireless Communications / with Management Studies MSc

[www.kingston.ac.uk/pgwirelesscomms](http://www.kingston.ac.uk/pgwirelesscomms)

[www.kingston.ac.uk/pgwirelesscommsmgt](http://www.kingston.ac.uk/pgwirelesscommsmgt)

FT PT

Wireless communications is a rapidly growing area with the potential to provide over-the-air high-speed and high-quality connectivity anywhere, anytime and to anyone. The efficient delivery of multimedia services over diverse wireless networks poses a significant technical challenge, as well as an opportunity. This course aims to develop individuals with a deep understanding of wireless communications and technologies to meet this challenge.

You can combine this course with management studies, enabling you to develop the skills to successfully lead teams and manage innovation.

### What you will study

This course will provide you with an understanding of the technical characteristics of wireless systems and the tools for wireless systems design and deployment. It covers advanced topics in wireless communications for voice, data and multimedia transmission. The fusion of the internet world and wireless is also addressed. You will also gain specialist knowledge of digital communications principles, multimedia communications principles, wireless networks, wireless security issues and other state-of-the-art wireless technologies. You will have access to a dedicated test WLAN/LAN with a diverse range of platforms and equipment, including wireless networks and enterprise scale networking technologies.

If you choose the 'with Management Studies' route, modules in finance, managing operations, entrepreneurship and/or managing people and organisations will set your technical knowledge in a management context.

### Key features

- The dissertation project gives you the opportunity to study an area of interest in greater depth. It can be undertaken in industry, giving you valuable industrial experience and an excellent talking point when you are looking for a job or promotion.
- You will have the option to work in one of our state-of-the-art research labs, called WMN (Wireless Multimedia and Networking). WMN is involved in EU and UK research collaborations and offers opportunities for advanced research and short-term research fellowships on completion of your MSc degree.
- You will have access to modern class and laboratory environments with the latest equipment, including wireless testbed (experimental) facilities.
- This course also benefits from close links with industries in the wireless area, including national and international mobile operators, manufacturers, regulators and high-profile research institutions.
- An active Industrial Committee (including experts from Huawei and Vodafone) ensures the course content is highly relevant to the industry's current needs.
- September and January entry dates allow you to choose when you would like to start your studies.

# Digital Media Kingston



We need to move away from the idea that arts people are ‘creatives’ and scientists are ‘techies’. Both fields are highly creative and are increasingly working together in the digital age – an animator and a programmer designing a computer game, for example. But most students in the arts and sciences across the globe don’t collaborate on projects until they meet in the world of work. This is a serious skills gap that has been identified by industry, and that’s where Kingston University is spearheading change.

Digital Media Kingston, with its cross-faculty initiative, is unique. We’re offering what industry is telling us that it needs. Our students will be fully equipped to play a major part in the digital age, which underpins everything in the 21st century.

## 3D Computer-Generated Imagery MA/MSc

[www.kingston.ac.uk/pgcomputergeneratedimageryma](http://www.kingston.ac.uk/pgcomputergeneratedimageryma)

[www.kingston.ac.uk/pgcomputergeneratedimagerymsc](http://www.kingston.ac.uk/pgcomputergeneratedimagerymsc)

FT PT

One of a suite of digital media courses, this course enables you to study professional digital media practice in a microstudio environment with a focus on 3D CGI, including the craft of computer animation and visual effects. You can specialise either in the design skills (MA) or programming skills (MSc) necessary for the field of 3D CGI. The course concludes with a project undertaken in collaboration with students from across the suite of courses.

### What you will study

The introduction focuses on developing a specialised and reflexive practice of your own while participating in digital media team production processes such as interactive design and agile development. You will also develop a thorough understanding of modelling, shading, lighting, rendering, animation and rigging and associated skills, such as rotoscoping and match-moving.

The MA route of the course emphasises digital modelling and texturing, with the option of character rigging. The MSc route emphasises high-level 3D graphics programming for games and character rigging. Project work for both the MA and MSc provides the opportunity to contextualise and apply these individual skills.

The final project encourages you to work in a team, taking a professional role such as shading/texture supervisor, digital painter, shading TD, texture artist/painter, etc, collaborating with students from the other digital media courses to produce a professional piece of work.

### Key features

- These courses have been developed in consultation with our industry panel, which includes representatives from Sony Computer Entertainment Europe, DreamWorks and Samsung Design Europe.
- This course utilises the best digital media expertise and resources from across the University, and will prepare you for employment in the digital media industry where teams of specialists work together to develop and author innovative digital media projects.
- Input from industry practitioners and experts will add a valuable dimension to your studies.
- You will have access to first-class technical facilities, including editing suites, moving-image studios, 3D workshops and other specialist resources.
- The courses have a project-based curriculum where collaborative interdisciplinary teamwork is encouraged.
- The industry-focused learning experience enables you to hone your specialist skills in a professional context. Work placements, real projects, internships and an industry mentoring scheme will also prepare you for entry into the fast-growing and highly competitive digital media arena.

## Games Development MA/MSc

[www.kingston.ac.uk/pggamesdevelopmentma](http://www.kingston.ac.uk/pggamesdevelopmentma)

[www.kingston.ac.uk/pggamesdevelopmentmsc](http://www.kingston.ac.uk/pggamesdevelopmentmsc)

FT PT

This course, one of a suite of digital media courses, enables you to study professional digital media practice in a microstudio environment with a focus on games development, including the craft of modelling, computer animation and visual effects. You can specialise either in the design skills (MA) or programming skills (MSc) necessary for the field of games development. The course concludes with a project undertaken in collaboration with students from across the suite of courses.

### What you will study

Following the introductory collaborative modules, you will develop a thorough understanding of the core 3D graphics of modelling, shading, lighting, rendering, animation and rigging and associated skills, such as rotoscoping and match-moving.

The MA route of the course covers the development of experiential interfaces and games design principles. Option modules enable you to develop an individual design project and/or specialise in narrative, audio or experience design.

The MSc route covers 3D graphics programming and the underpinning mathematics, physics and coding skills. Option modules enable you to develop an individual design project and/or specialise in development methods, multimedia and/or networked communications.

The final project encourages you to work in a team, taking a professional role such as programmer, level designer, art director, etc, collaborating with other digital media students to produce a professional piece of work. Alternatively, you may undertake an industry-based project.

### Key features

- These courses have been developed in consultation with our industry panel, which includes representatives from Sony Computer Entertainment Europe, DreamWorks and Samsung Design Europe.
- This course has been designed to utilise the best digital media expertise and resources from across the University, and will prepare you for employment in the digital media industry where teams of specialists work together to develop and author innovative digital media projects.
- You will benefit from the input from industry practitioners and experts, adding a valuable dimension to your studies.
- Our first-class technical facilities include editing suites, moving-image studios, 3D workshops and other specialist resources.
- The project-based curriculum encourages collaborative interdisciplinary teamwork.
- The industry-focused learning experience enables you to hone your specialist skills in a professional context. Work placements, real projects, internships and an industry mentoring scheme will also prepare you for entry into the fast-growing and highly competitive digital media arena.

## User Experience Design MA/MSc

[www.kingston.ac.uk/pguserexperiencedesignma](http://www.kingston.ac.uk/pguserexperiencedesignma)

[www.kingston.ac.uk/pguserexperiencedesignmsc](http://www.kingston.ac.uk/pguserexperiencedesignmsc)

FT PT

This course, one of a suite of digital media courses, will prepare you for the world of interaction design, information architecture, usability engineering and user-experience research. You can specialise either in the design skills (MA) or prototyping skills (MSc) necessary for the field of user-experience design. The course concludes with a project carried out in collaboration with staff, industrial hosts or students from across the suite of courses.

### What you will study

The introduction focuses on teamwork, reflexive practice and digital media production processes. You will then study six taught modules (common to MA and MSc), covering experience design, engineering approaches to human-computer interaction, and digital production processes and practice.

Two option modules and the dissertation project reflect the flavour of the award: for MSc, building prototype user interfaces in the context of e-business; and for MA, the creation of multimedia content and games.

The final project encourages you to work in a team, taking a professional role such as user-interface designer, user-experience designer or information architect, collaborating with students from the other digital media courses, staff and industrial hosts to produce a professional piece of work.

### Key features

- These courses have been developed in consultation with our industry panel, which includes representatives from Sony Computer Entertainment Europe, DreamWorks and Samsung Design Europe.
- The suite of courses has been specifically designed to utilise the best digital media expertise and resources from across the University, and will prepare you for employment in the digital media industry where teams of specialists work together to develop and author innovative digital media projects.
- Input from industry practitioners and experts will add a valuable dimension to your studies.
- You will have access to first-class technical facilities, including a user studies laboratory, a Tobii eye tracker, and Morae usability testing software editing suites, moving-image studios and 3D workshops.
- The courses have a project-based curriculum where collaborative interdisciplinary teamwork is encouraged.
- The industry-focused learning experience enables you to hone your specialist skills in a professional context. Work placements, real projects, internships and an industry mentoring scheme mean these courses will arm you for entry into the fast-growing and highly competitive digital media arena.



# Geography, Geology and the Environment



As the awareness of the impact of climate change and the Earth's diminishing natural resources increases, as does the demand for professionals with skills in environmental management and sustainable development.

Alongside our well-established and highly reputable programme in geographical information systems and science, our courses also provide a broad scope of opportunities within topical areas such as sustainability, climate change, natural hazards, globalisation and biodiversity.

Leading these courses is an interdisciplinary team that includes human and physical geographers, GIS specialists, geologists, geochemists and environmental scientists. Many of the staff in the School also carry out research as members of the Centre for Earth and Environmental Sciences Research (CEESR), which is recognised as a centre of research excellence within the University.

Our well-equipped laboratories facilitate teaching and research into subjects such as environmental monitoring, geology and geochemistry, and include mapping/GIS/computing facilities and specialist instrumentation laboratories (eg nuclear metrology, laser raman spectroscopy, 3D mapping).

## Applied GIS/GI Systems and Science

PgCert/PgDip/MSc

[www.kingston.ac.uk/pggis](http://www.kingston.ac.uk/pggis)

**FT** **PT**

These GIS courses are designed to provide a high level of competency in the principles of GI Science and the use of geotechnology, as well as the skills to routinely use professional software for data acquisition, handling, exploration and mapping.

The MSc Applied Geographical Information Systems (AGIS) is taught partly in distance-learning mode and partly in traditional classroom mode. The MSc in Geographical Information Systems and Science (GISS) is taught entirely in distance-learning mode.

### What you will study

Each course has a different focus; however, both offer hands-on experience of the most current GIS tools and techniques. The MSc AGIS places an emphasis on the application of GIS, with option modules enabling you to develop themes of geographical and environmental interest to sit alongside your core GIS course. The MSc GISS is designed for those who prefer a full GIS programme but with options to specialise in areas of the discipline that are of particular interest.

Both courses cover the principles of GI science and geotechnology and the foundations of geographical information handling. You will learn how to handle spatial entities for data transformations, generalisation and aggregation, and will develop competency in analytical operations, methods and spatial analyses. You will have the chance to implement principles of map design and graphical representation techniques, and will gain an understanding of spatial database systems and application design. You will perform storage and retrieval operations, and work with alternative data models, 3D modelling and advanced visualisation. You will also explore the role of GIS in society, and study a range of themes in geography and environmental science.

### Key features

- Kingston University has a long involvement in the provision of specialist education in geographical information systems and science, and was the first in the world to offer a degree in GIS.
- Kingston is an ESRI Development Center, which rewards universities that have exemplary GIS programmes. We are one of only two universities in Europe to gain this recognition.
- Distance-learning modules enable those in employment to study without the need for substantial release time.
- You may have the opportunity to take a field trip abroad. For example, current students taking the Mobile GIS option module visit Malta.
- Dissertation awards are sponsored by Ordnance Survey and we have an ESRI-sponsored Student of the Year award.

**i** See the course webpage for more information about the Mobile GIS field trip.

## Environmental & Earth Resources Management

PgCert/PgDip/MSc

[www.kingston.ac.uk/pgenviron](http://www.kingston.ac.uk/pgenviron)

**FT** **PT (PgCert only)**

This course provides a holistic education and training in the understanding, management and development of the Earth's natural resources. It covers a broad range of environmental and sustainability issues and is designed especially for those wishing to enhance their existing skills and qualifications for careers in the environmental and Earth science professions.

### What you will study

Environmental law and policy is a central theme across the taught modules, and you can specialise in a particular area of interest by replacing a taught module with a self-study module on contemporary issues in environmental and Earth resources management.

You will examine the need for a multidisciplinary approach to the management of environmental problems arising from the use and misuse of natural resources. You will be trained in relevant Earth science techniques for the collection, analysis and interpretation of environmental data.

You will have the opportunity to apply your knowledge and skills to the study of particular environmental problems. You will also investigate the rationale behind the exploitation and conservation of the natural environment and the need for a sustainable management strategy.

You can use your major research project to tailor the course to suit your interests.

### Key features

- This course will provide you with the skills applicable to a career in any aspect of resource management and development, or in monitoring the environmental impact of resource development. See the course webpage (under 'After you graduate') to find out more.
- You will have access to our specialist research laboratories and analytical facilities, all backed up by technical support.
- Analytical instrumentation, also accessed by PhD students and established research scientists, is used in many modules and during dissertation research.

**i** See the course webpage to find out more about our facilities.

“To get ahead and to be a credible corporate social responsibility professional, you really do need a masters degree, and that’s where Kingston came in.”

Louise Adams, MSc Environmental and Earth Resource Management graduate

## Hazards & Disaster Management

PgCert/PgDip/MSc

[www.kingston.ac.uk/pghazardsdisastermgt](http://www.kingston.ac.uk/pghazardsdisastermgt)

FT PT

This course focuses on both the scientific knowledge of hazards and modern strategies of emergency planning. Its interdisciplinary approach combines traditional classroom and field-based teaching and learning techniques with modern ICT-based learning support. A strong emphasis is placed on research-led teaching, student-centred learning and team-based activities, all of which develop the necessary skills required by practitioners in the field of hazard and disaster management.

### What you will study

You will study the underpinning scientific principles of both natural hazards (eg hurricanes, storms and tornadoes, flooding, landslides, volcanic eruptions, earthquakes, tsunamis and radon gas emissions) and human-induced disasters (eg terrorism, explosions and oil tanker accidents).

You will also cover modern disaster management strategies and planning techniques for the mitigation (eg structural measures and education), preparation (eg early warning), response (eg search and rescue) and recovery (eg insurance) phases.

Fieldwork is an essential part of this course and you will undertake a supervised week-long visit to a European field destination affected by multi-hazards (usually to Tenerife in June).

You will also engage with the recently published literature in these fields, and will undertake active research in one or more of your chosen hazard areas.

### Key features

- This course is ideal if you want to start or advance a career in hazard or risk management, environmental monitoring, emergency planning or catastrophe-related mitigation.
- You can choose to study for a PgCert, PgDip or MSc. If you choose the MSc qualification, the independent research project gives you the chance to specialise further by studying an area of interest in greater depth and gain valuable research skills. Our students often find this an excellent selling point when looking for a job or promotion.
- We have strong links with industry and practitioners in the emergency and disaster management field, including Search And Rescue Assistance In Disasters (SARAID), RNLI and Surrey County Council Emergency Planning Unit.

**i** See the course webpage to find out more about opportunities for fieldwork.

## Search & Rescue Management\*

PgCert/PgDip/MSc

[www.kingston.ac.uk/pgsearchrescuemgt](http://www.kingston.ac.uk/pgsearchrescuemgt)

PT

This course, which offers the first formal search and rescue (SAR) qualification at this level in the world, covers all aspects of SAR – at sea, in the air, inland water or floods and underground – and in every environment – urban, mountain, lowland or coastal. Taught almost exclusively in distance mode, it has a strong geographic, environmental hazards and geographical information systems (GIS) component.

### What you will study

You will study the fundamentals of geographic information, spatial analysis, disaster management and atmospheric and oceanographic hazards, and will have access to the world's leading GIS software and resources.

You will also take modules in research skills, project management, SAR fundamentals, SAR technology and SAR management. In addition, you will have the opportunity to take part in two week-long field trip modules, working alongside leading SAR organisations. These field trips will give you the chance to test your practical skills as well as meet and work with other students.

### Key features

- This unique postgraduate qualification in SAR management will give you a strong advantage in a competitive sector.
- Most of the course is taught in distance-learning mode, allowing those who are already working within the industry, or those living abroad, to study in their own time.
- You will be taught by staff from our GIS, Environmental Hazards and Disaster Management and Geography teaching teams, as well as experienced SAR researchers and practitioners.
- There is a guest lecture series (also available in distance-learning mode) drawing on experts from many aspects of the SAR world.
- In some cases the completion of the fieldwork elements will also result in certification from external bodies.

*\*At the time of writing, this course was subject to validation. Please see the website for further information.*

## Sustainability, Environment & Change

PgCert/PgDip/MSc

[www.kingston.ac.uk/pgsustainabilityenvironmentchange](http://www.kingston.ac.uk/pgsustainabilityenvironmentchange)

FT PT

This is one of a suite of postgraduate courses aimed at the next generation of sustainability professionals. Students from different pathways work together on key issues of economy, society and environment. You will explore the roles of regulatory practice and governance, and technological and behavioural change in moving towards a low-carbon, less resource-profligate society. Understanding the climate change agenda and how to respond is a central theme.

### What you will study

This course addresses the broad concerns for sustainable futures. You will review climate change throughout the Earth's history to gain perspectives on anthropogenic and natural drivers of climate change. You will also explore potential impacts on society, practical and policy responses, and regulatory mechanisms.

Practical learning is central to the course philosophy, from understanding scientific principles and procedures, to learning about economic, social accountability and legal frameworks.

If you choose to study for the MSc, the research project provides an opportunity to explore a particular area of interest within environmental change and sustainability.

### Key features

- Our suite of a postgraduate programmes aimed at the next generation of sustainability professionals are supported by the Kingston University Sustainability Hub ([www.kingston.ac.uk/sustainability](http://www.kingston.ac.uk/sustainability)). Kingston University was recently ranked 18th out of 138 universities in *The Guardian's* People and Planet Green League 2011, which looks at UK universities' environmental and ethical performance.
- Taught by staff from across the University, this course integrates teaching and research expertise from the disciplines of geography, environment, survey planning and law.
- You will have access to specialist research laboratories and analytical facilities supported by technical support. In particular, you will have access to the Sustainability Hub resources, including the C-SCAIPÉ reading room and resource area, which holds extensive collections of governmental, business and NGO publications on sustainability themes (see [www.kingston.ac.uk/sustainability](http://www.kingston.ac.uk/sustainability)).
- Career prospects in this field are good: sustainability professionals are in demand, and well-qualified people with these new multidisciplinary skills and knowledge are in short supply.
- We offer a part-time option to help you fit your studies around other commitments. You may also take individual modules as an associate student.

## Sustainable Environmental Development with Management Studies

PgCert/PgDip/MSc

[www.kingston.ac.uk/pgsusdev](http://www.kingston.ac.uk/pgsusdev)

FT PT

This course is ideal if you are interested in the environment and issues concerning sustainable development, conservation and the management of natural resources. It will enable you to gain the skills and knowledge to assist with the implementation and maintenance of sustainable environmental management. The course focuses on combining sound environmental practice with economic and social agendas. A study of the fundamentals of management theory will set your scientific knowledge in a vocational context.

### What you will study

You will examine the types, sources and effects of environmental contaminants and their effects on ecosystems and human health. You will also evaluate the changing nature of human interaction with the environment; examine current conservation policy, strategies and issues; and look at the involvement and response of commercial, industrial and public sectors to environmental issues.

The management studies modules give you an insight into how the business world operates, and will introduce you to marketing concepts and people management skills.

### Key features

- The MSc independent research project gives you the chance to further specialise by studying an area of interest in greater depth and gain valuable research skills. Our students often find this an excellent selling point when looking for a job or promotion.
- The management studies element of this course will be applicable to a wide range of business environments – from small, independent consultancies to large multinational organisations.
- Highly experienced staff at the Kingston Business School teach the management studies modules. You will benefit from their links with management professionals and business expertise.

“The course also developed my professional network, and introduced me to a wider range of opportunities and resources in the form of forums, associations, seminars, etc.”

Virginie Timothee, MSc Sustainable Environmental Development with Management Studies graduate

# Life Sciences



Life sciences covers the structure and behaviour of living organisms, their life processes and relationships to each other and their environment.

At Kingston, our staff comprises anatomists, biochemists, biomedical scientists, ecologists, forensic scientists, media technologists, molecular biologists, nutritionists, parasitologists, pharmacologists, physicists and sports scientists. In addition, we have invested heavily in the development of labs for teaching and research into subjects such as molecular biology, cancer biology, genetics, immunology, microbiology, nutrition, parasitology and radiotracer studies, to ensure that our students graduate with the skills they need to be successful in the modern world.

## Biomedical Science with Management Studies PgCert/PgDip/MSc

[www.kingston.ac.uk/pgbiomedmgt](http://www.kingston.ac.uk/pgbiomedmgt)

FT PT

This course offers an in-depth understanding of disease processes complemented by a knowledge of management studies. You will study selected topics in biomedical science combined with the fundamentals of management theory, setting your scientific knowledge in a vocational context. This combination is particularly useful if you are seeking to gain a management position within the biomedical sciences industries.

### What you will study

Core modules will familiarise you with the theoretical and practical aspects of molecular medicine used in research and hospital laboratories; the molecular basis of immunological mechanisms; and cellular mechanisms of disease, physiological manifestations and implications to public health. You will also learn about the principles and practice of laboratory management in biomedical science, and will study the skills required for researching and communicating in biomedical science.

The management studies modules give you an insight into how the business world operates and will introduce you to marketing concepts and people management skills.

Your MSc research project can be carried out with one of our research groups or you may take a placement in a laboratory in industry or in the NHS. Part-time students may carry out their project at their place of work, if appropriate.

### Key features

- The management studies modules are taught by our highly experienced staff at the Kingston Business School. You will also benefit from their links with management professionals and business expertise.
- Management studies modules are taught over one weekend and on two further Saturdays, allowing you the flexibility to fit in your studies around your work commitments.
- The course also includes lectures from practising biomedical scientists who are experts in their fields, as well as visits to specialist laboratories to enhance your understanding of the working environment.

## Biomedical Science PgCert/PgDip/MSc Biomedical Science: Haematology/ Medical Microbiology PgCert/PgDip/MSc

[www.kingston.ac.uk/pgbiomed](http://www.kingston.ac.uk/pgbiomed)

FT PT

This course, which is accredited by the Institute of Biomedical Science, enables you to gain an in-depth understanding of disease processes. It links academic knowledge to the practical applications of biomedical science, particularly in relation to modern diagnostic methods. You can choose to study for the postgraduate certificate in biomedical science or for a postgraduate diploma or masters degree specialising in one of two pathways – haematology or medical microbiology.

### What you will study

Core modules will familiarise you with the theoretical and practical aspects of molecular medicine used in research and hospital laboratories; the molecular basis of immunological mechanisms; and cellular mechanisms of disease, physiological manifestations and implications to public health. You will learn about the principles and practice of laboratory management in biomedical science, and you will study the skills required for researching and communicating in biomedical science. You will also study modules in your elected specialist route. In addition to subject-specific knowledge, the course aims to develop your communication and other skills.

Your MSc research project can be carried out either with one of our research groups, during a placement in a laboratory or with the NHS, or at your place of work.

### Key features

- The course includes lectures from practising biomedical scientists who are experts in their fields, as well as visits to specialist laboratories to enhance your understanding of the working environment.
- Single modules may be taken as part of 'Continuing Professional Development' programmes.
- We attract students from a wide variety of backgrounds, giving you the opportunity to learn from others' experiences.
- Students graduating with an MSc in Biomedical Science have a better employability record than those with an undergraduate degree, and go on to work in a wide variety of laboratory and science-based positions.

“We were inspired and motivated by lecturers who made studying a pleasure.”

Jackie Kenny, MSc Biomedical Science graduate

## Biotechnology PgCert/PgDip/MSc

[www.kingston.ac.uk/pgbiotechnology](http://www.kingston.ac.uk/pgbiotechnology)

FT PT

Biotechnology brings together skills from a range of disciplines, including biology, chemistry and computer science. Using state-of-the-art molecular and genetic technology to enhance biological organisms and their products, it develops novel solutions to medical, environmental and agricultural issues.

This course is designed to provide you with the genetic and molecular skills for a career in the biotechnology industries. Taught by leading researchers from a range of fields, it is supported by the latest equipment and technology and is continually updated in light of new advances. From 2011, students will have access to Ion Torrent sequencing technology for DNA and RNA sequencing.

### What you will study

You will be introduced to the range of applications of biotechnology in industry and gain experience of many genetic and molecular methods, including the latest techniques in genomics, proteomics and bioinformatics, taught by academics who are actively using these techniques in their own research. You will explore applications of biotechnology in medicine, agriculture and environmental protection.

A module in research and enterprise will introduce you to issues concerning the commercial exploitation of biotechnological innovations, equipping you with the necessary key skills to carry out the research project, which forms a major part of the course. This may be carried out at any one of the three universities running the course (see 'Key features'), or in industry. You can also select option modules, according to your interests, in further analytical techniques, cancer biology and pharmaceutical technology.

### Key features

- This course is designed for students interested in pursuing a career in the biotechnology sector – whether in the multinational biotechnology and pharmaceutical industry or the smaller companies exploiting new innovations in the field. It is particularly suitable if you have a good first degree in a biological science or biotechnology with a strong emphasis on genetics and molecular biology. It will also prepare you to pursue a research career at a university or in industry and for further postgraduate study such as a PhD.
- The course is delivered jointly by three universities – Kingston University; Royal Holloway, University of London; and St George's, University of London. This ensures that you have access to the latest technology and expertise, including specialist laboratories that provide facilities, for example, in bioinformatics, analytical chemistry, pharmaceutical technology, microbiology, immunology, genomics and proteomics.

## Cancer Biology PgCert/PgDip/MSc

[www.kingston.ac.uk/pgcancerbiology](http://www.kingston.ac.uk/pgcancerbiology)

FT PT

This course will enable you to gain an in-depth understanding of the disease processes involved in malignancy, and to explore the scientific rationale for various therapeutic options. It is designed to enhance your abilities to link the academic knowledge with the practical applications of cancer biology, focusing particularly on modern advances in this field.

### What you will study

You will be trained in research methods in science and will learn about the techniques used in molecular biology, acquiring new and/or improved practical skills. You will study the biology of disease, tumour biology, immunology, molecular oncology, haematological malignancy, and diagnosis and therapy.

You will gain a comprehensive understanding of the principles and practice of a variety of core topics in current areas of medical science, as well as an in-depth knowledge of oncology topics and an awareness of their relationship to other medical disciplines. In addition, you will learn how to plan, carry out and report on a piece of independent scientific research.

In addition to subject-specific knowledge, the course aims to develop your communication skills and other key skills.

### Key features

- Your MSc research project can be carried out with one of our research groups. Part-time students may carry out their project at their place of work.
- You will have the opportunity to work in industry or at a research institute.
- You will be taught by researchers at the cutting-edge of this fascinating field.

**“A very important aspect of the course was the 10-week research project. This focused on basic cell culture techniques and has equipped me with the skills and confidence needed in the professional world, as well as giving me the opportunity to pursue a PhD at Kingston.”**

Elena Polycarpou, MSc Cancer Biology graduate

# Mechanical and Automotive Engineering



The School of Mechanical and Automotive Engineering, based at the Roehampton Vale campus, has an applied approach to teaching, which is supported by a range of laboratories, including automotive, materials, metrology and a machine laboratory, and the latest industry-standard software.

The laboratories are well-equipped and include engine test cells, an embedded system laboratory based on National Instruments equipment, rapid prototyping machinery, CNC vertical milling machines, wind tunnels, rolling-road dynamometer, surface-measuring equipment, tensile and compression testing machines and a range of vehicles.

The academic staff is involved in a range of research projects and has a wide range of industrial experience in addition to their academic expertise.

Many of the courses are regularly reviewed by the relevant accrediting bodies.



## Advanced Industrial & Manufacturing Systems PgDip/MSc

[www.kingston.ac.uk/pgindmansys](http://www.kingston.ac.uk/pgindmansys)

FT PT

In today's global competition, any ambitious company not only has to compete on cost, but also on quality, flexibility and speed. This course, which is accredited by the Institution of Mechanical Engineers (IMechE), explores the essential manufacturing methods and resources optimisation techniques that are used to turn innovative ideas into real products in a cost-effective way. It also covers the critical skills such as CAD/CAM, materials processes, quality management and automation so that new products can be launched quickly and are of the highest quality.

### What you will study

You will learn how to deal with complex problems and challenges experienced by real-world manufacturing and engineering companies. You will also study the business context of manufacturing practices and how to apply systematic solutions in an integrated manufacturing environment. You will learn how to apply appropriate engineering analyses, ISO9000 quality concept, operational methods and resources management to improve overall efficiency, and will study technical aspects and operational issues related to most engineering companies. In addition, you will gain the skills to communicate with others in the field of manufacturing and industrial engineering through reports, forums and visual presentations.

Alongside the core modules, option modules are offered to enable you to specialise further in line with your career ambitions.

The MSc project enables you to conduct sustained, in-depth, original research related to complex theoretical arguments within the engineering industry. Your project can be selected from a wide range of options, enabling you to establish yourself as a subject specialist in your chosen field.

### Key features

- Throughout the course, academic teaching will be complemented by specialist speakers from industry, keeping you up to date with the latest developments.
- You will have the opportunity to visit engineering companies (depending on availability) and attend technical seminars, both within and outside the University.
- A wide range of industrial case studies will be used in teaching, enabling you to learn from real-world examples.
- Many modules are backed by practical hands-on workshops, where you will learn skills that can easily be transferred to the working environment.
- Many MSc projects are industrially orientated, giving you first-hand experience in solving real-world problems.

## Advanced Product Design Engineering PgDip/MSc

[www.kingston.ac.uk/pgproductdesignengineering](http://www.kingston.ac.uk/pgproductdesignengineering)

FT PT

This course, which is accredited by the Institution of Mechanical Engineers (IMechE), focuses on the computer-aided engineering software and web-based CAD/CAM systems that make it more efficient to design and test a product on computers without committing physical resources. It covers the latest computing technology at all stages of the design process in an engineering environment, as well as the potential constraints in that process, including management and business issues.

### What you will study

The course provides an in-depth knowledge of advanced skills in product design and development within an engineering environment. It offers an insight into the entire product lifecycle management (PLM) – from its conception, through design and manufacture, to service and disposal. You will have the chance to study manufacturing technology, mechatronics control, electronic engineering, IT applications, the use of the latest materials and product design software, and emerging technologies such as advanced web/internet techniques.

Advanced topics – such as 3D solid modelling, machining simulation and finite element analysis – allow you to gain further practical and theoretical knowledge of analytical software tools used in product design. There will also be opportunities for you to engage in laboratory and group activities.

Option modules will introduce subjects designed to help further enhance your career ambitions, including business-focused subjects.

The MSc project gives you the opportunity to choose a field of study in which to establish yourself as a specialist.

### Key features

- Teaching in many technical modules is backed up by appropriate hands-on experience and workshops, which can be transferred directly to your working environment.
- Academic teaching is complemented by visits from industry experts. You will also have plenty of opportunities to attend relevant technical seminars, both within and outside the University.

## Automotive Engineering / Automotive Engineering (Commercial Vehicle Technology) / Automotive Engineering (Motorcycle Technology) PgDip/MSc

[www.kingston.ac.uk/pgauto](http://www.kingston.ac.uk/pgauto)

FT PT

This course, which is accredited by the Institution of Mechanical Engineers at Chartered Engineer level, will enable you to translate current and emerging automotive technologies into future products. Designed to enhance your career prospects and personal development, it will provide you with a balanced mixture of the advanced technical competencies and transferable skills required by global automotive manufacturers and original equipment suppliers. You can specialise in automotive, commercial vehicle or motorcycle engineering.

### What you will study

You will develop a critical awareness of the current developments in key automotive technologies, production methods, processes and management techniques. You will also study the various test and development techniques employed in automotive engineering, as well as their application and benefits. You will learn how to apply the principles and practical techniques of automotive engineering to the solution of problems.

The elective modules focus on the specialist area of your choice and will expand the knowledge and skills gained in the common core modules. You can specialise either in automotive, commercial vehicle or motorcycle engineering by taking the relevant elective and field-specific modules. The MSc project gives you the opportunity to study a real-world problem within the automotive industry.

### Key features

- Throughout the course, academic teaching is complemented by presentations from industry experts and by industrial visits. Recent visits include trips to Jaguar Cars, BMW, IBC (General Motors), the Commercial Vehicle and Automotive Trade Show, Delphi and the design studios at Lotus Cars.
- In addition to improving your technical skills and knowledge, you will gain professional, analytical and management skills, such as communication, teamwork, IT and problem-solving.
- September and January entry dates allow you to choose when you would like to start your studies, and the flexible delivery pattern allows part-time students to complete the course while in full-time employment.
- Regular course reviews ensure relevant and current content through inclusion of new technologies, reflecting the changing needs of industry.

**i** Visit the course webpage to see photos of site visits and workshops.

## Engineering Projects & Systems Management PgDip/MSc

[www.kingston.ac.uk/pgengsysmgt](http://www.kingston.ac.uk/pgengsysmgt)

FT PT

In today's global market, engineering graduates who have both technical and managerial skills are highly sought after by companies looking to maintain a competitive edge. This course (accredited by the Institution of Mechanical Engineers, IMechE) is designed to address this demand by offering key engineering management skills as well as competent project management knowledge. It aims to develop your ability to improve productivity, identify operational issues and optimise key resources for new projects, develop new products, construct new manufacturing facilities and implement changes in organisational structure.

### What you will study

You will learn to apply the essential skills in project and resources management within the engineering field. You will also learn how to identify, evaluate and propose solutions to critical engineering systems management areas that need improvement. In addition, you will gain an understanding of business operation and international marketing appropriate to engineering fields.

You will learn how to devise and evaluate procedures to implement proposed management solutions. You will study analytical techniques to deal with engineering constraints and to maximise company profits. You will also become familiar with the concepts of entrepreneurship, quality management, ISO9000, financial systems, risk analysis and other important aspects in the decision-making process in an engineering environment.

Many modules are backed by practical hands-on software workshops and group activities.

The MSc project enables you to specialise further. Detailed consultation will be provided to ensure you choose a topic that matches your career ambitions. Many projects are company orientated, giving you the opportunity to deal with real-world problems.

### Key features

- Throughout the course, academic teaching is complemented by specialist speakers from industry and practical hands-on sessions.
- You will have the opportunity to visit engineering companies (depending on availability) and attend technical seminars, both within and outside the University.
- A wide range of industrial case studies will be used in teaching, enabling you to learn from real-world examples.
- Relevant option modules are provided to allow you to specialise in preferred subjects.
- You will gain first-hand experience of solving real-world problems through your MSc project, many of which are industrially orientated.

“This course is more or less an MBA but from an engineer's point of view.”

Abdulla, MSc Engineering Projects & Systems Management graduate

## Mechanical Engineering PgDip/MSc

[www.kingston.ac.uk/pgmech](http://www.kingston.ac.uk/pgmech)

FT PT

This course, accredited by the Institution of Mechanical Engineers (IMechE), provides a strategic overview of engineering and management issues, enabling you to develop an understanding of the issues facing the engineering industries, including engineering digital simulations, business resource management, risk assessment, health and safety and environmental design issues. It will broaden and deepen your understanding of mechanical engineering and provide the management and business skills necessary to take on leadership roles in major engineering projects.

### What you will study

You will gain a broad understanding of the practical requirements of mechanical engineering, as well as knowledge of the subjects that are both specific and complementary to mechanical engineering, such as e-engineering with advanced CAD/CAM and the issues of green engineering and energy efficiency. You will also develop the ability to solve the deeper problems that arise in mechanical engineering, such as computational fluids dynamics, finite elements analysis, mechanism system design and analysis and control.

The MSc features an Industrial Project Review and Analysis module, which is normally taken in industry and provides you with the challenge of undertaking a real-world problem in an engineering environment. You will also develop an awareness of work in a multidisciplinary team within an engineering organisation and with real industrial constraints.

### Key features

- Throughout this course, you will have the chance to:
  - visit industrial companies to see how the technologies are used in real production environments;
  - listen to outside speakers, who will keep you informed of the latest developments in industry; and
  - work on industrially orientated projects and tackle real-world problems.
- Four of the nine modules on this course are optional, enabling you to tailor the curriculum to your own interests or career aspirations.
- You can choose to study this course full time or part time to fit in with work commitments. September and January start dates give you additional flexibility.

## Mechatronic Systems PgDip/MSc

[www.kingston.ac.uk/pgmechatronic](http://www.kingston.ac.uk/pgmechatronic)

FT PT

Mechatronics is an exciting, growing field that combines mechanical, electronic and control systems to create a complete device. Most modern mechanical devices have incorporated ('embedded') electronic control systems; mechatronics deals with this integration.

This IMechE-accredited course takes an applied approach to mechatronics, developing engineers capable of conceiving, designing, prototyping and producing mechatronic system solutions. Our hands-on teaching methods utilise industrial-standard, state-of-the-art equipment and software, from concept to implementation, giving you a distinct advantage on the global job market.

### What you will study

Our course develops and consolidates theoretical knowledge and skills gained at the first degree level. It combines disciplines such as engineering, computer science, electronics, mathematics, physics and information technology to further the knowledge not only through theory but also by putting these skills into practice in extensive hands-on tutorials and final project work.

Core modules cover a range of disciplines, while option modules allow you to specialise in one of three pathways: Mechatronic Design, Mechatronic Software (technology) or Mechatronic Systems and Management.

Your final projects will be related to our applied, industrial research, supported by the relevant experts, preparing you for multidisciplinary, fast-moving industries, such as avionics, defence, automotive engineering, satellite technologies, robotics, healthcare technologies, manufacturing, transportation systems and computer hardware.

### Key features

- This course is designed to meet the demand for skilled technical professionals within the 'new' integrated technologies.
- A strong Industrial Advisory Board, including industry leaders such as National Instruments, Thales and Atmel, and industrial bodies such as The IET, SEMTA and the IMechE, ensures that the course content reflects the changing needs of industry.
- You will benefit from industrial guest lectures, which offer cutting-edge, up-to date information on the latest industrial developments in the field.
- The accredited status means that this course represents the knowledge base required to achieve Chartered status.
- This course can be studied full time or part time, to fit in with work commitments – each module is delivered as a one-week block. September and January start dates give you extra flexibility.

## Renewable Energy Engineering PgDip/MSc

[www.kingston.ac.uk/pgrenewableenergy](http://www.kingston.ac.uk/pgrenewableenergy)

FT PT

Issues of climate change have become a major challenge for the 21st century, with the need to find an alternative supply of cleaner energy from renewable sources becoming a priority. This course enables those with an undergraduate degree, or equivalent, in engineering or related sciences to specialise in renewable energy engineering, technology and applications. It provides an in-depth knowledge of renewable energy systems design and development, and commercial consultancy and project management within the sustainable engineering environment.

### What you will study

You will gain technical skills in and knowledge of solar power, wind power, bio-fuel and fuel cell technologies, as well as renewable energy business and management. You will also develop your professional, analytical and management skills.

Option modules enable you to specialise in project engineering and management or engineering design and development. Advanced topics, such as 3D solid modelling, virtual product design and simulation, finite element and CFD analysis, allow you to gain further practical and theoretical knowledge of analytical software tools used in product design.

You will work on a wide range of projects, many of which are associated with real-world problems in industry. There will also be plenty of opportunities to engage in laboratory and group activities. The MSc project enables you to choose a field of study in which to establish yourself as a specialist.

### Key features

- This course is part of the newly established Alternative Energy Group for Renewable Energy Engineering at Kingston University.
- You will gain hands-on virtual design experience using industry-recommended software technology in CAD, CFD and FEA analysis.
- The programme incorporates specialist field trips for group projects. You will also have the opportunity to work on research in the areas of wind power, solar power, biofuels and fuel cells related technologies.
- This course aims to provide specialist skills to pursue career pathways in the following areas of project engineering and management:
  - Solar power engineering design and development
  - Wind power engineering design and development
  - Bio-fuel and fuel cells technologies
  - Renewable energy business and management

“The experience I have gained has given me a better understanding of the market and tips on how to develop projects within this new field, as well as a competitive edge over other engineers!”

Kharait Rounak, MSc Renewable Energy Engineering graduate

# Pharmacy and Chemistry



The School of Pharmacy and Chemistry offers a broad range of postgraduate taught courses, with our Pharmaceutical Science, Analytical Chemistry and Pharmaceutical Analysis programmes also including a 'With Management Studies' option.

More recently the School has introduced the Diploma in Pharmacy Practice, which is fully accredited by the General Pharmaceutical Council as part of its Overseas Pharmacists Assessment Programme. A new MSc in Pharmaceutical Technology is also planned for introduction in 2013.

The School's state-of-the-art facilities include modern chemical and pharmaceutical sciences laboratories and cutting-edge analytical and forensic instrumentation. The quality of these facilities and programmes, as well as the student-centred approach by academic staff, attracts students from across the world to study pharmaceutical and chemical sciences at Kingston.

## Analytical Chemistry / with Management Studies PgCert/PgDip/MSc

[www.kingston.ac.uk/pganchem](http://www.kingston.ac.uk/pganchem)

[www.kingston.ac.uk/pganchemmgt](http://www.kingston.ac.uk/pganchemmgt)

**FT** **PT**

Chemical analysis plays a role in virtually all aspects of everyday life throughout the world. With analytical techniques and instrumentation becoming evermore sophisticated, there is an increasing demand for qualified analytical chemists. This industrially relevant course will provide you with a strong background in the theory of analytical techniques and give you the ability to apply these techniques to complex analytical problems. You can choose to combine your studies with training in the fundamentals of management theory.

### What you will study

You will gain the key skills required in the specialised area of analytical chemistry, including good measurement and scientific practice, evaluation interpretation of data, and other professional and organisational skills. You will also study core analytical techniques and their applications.

To put your studies into context, you may be offered a placement within industry (depending on your results and project availability) where you will carry out your independent research project. This could be within a pharmaceutical company, a forensic laboratory, analytical consultancy, hospital laboratory or research lab. Part-time students may carry out their project at their place of work, if appropriate. There is also scope to study and explore recent trends in analytical chemistry and the latest analytical techniques.

### Management Studies option

You can choose to include modules in management studies within this degree. This enables you to explore the fundamentals of management theory within the commercial and public sectors, setting your scientific knowledge in a vocational context.

### Key features

- The Analytical Chemistry MSc (ie not including Management Studies) provides exemption from Part A of the Mastership in Chemical Analysis, which is the statutory qualification for a public analyst.
- The management studies modules are taught by staff at Kingston Business School over 3–4 weekends, giving you the flexibility to fit in your studies around your work commitments.
- The 'with Management Studies' route is particularly useful if you are seeking to gain a management position within the pharmaceutical and allied industries.
- The course is supported by visiting speakers who are experts in their field; relevant industrial visits; and a careers and networking event.

**i** See the course webpage to find out more about who teaches this course.

## Forensic Analysis PgCert/PgDip/MSc

[www.kingston.ac.uk/pgforensic](http://www.kingston.ac.uk/pgforensic)

**FT**

This course will enable you to gain a strong background in the theory of analytical and forensic techniques and how to apply them to complex problems such as scenes of crime. It emphasises the key skills required in this specialised area of science, including good measurement and scientific practice, sample collection and chain of custody, evaluation and interpretation of data, and constructing expert witness reports. It also gives you the opportunity to present evidence at a mock courtroom trial in a magistrates' court.

### What you will study

You will explore recent trends in forensic science and learn about the latest analytical devices used, such as atomic and molecular spectroscopic and separation techniques, and DNA profiling.

You will look at the role of the forensic scientist and learn how to, for example, investigate and analyse drugs of abuse, fibres and firearms, and conduct fire investigation. In addition, you will have the opportunity to carry out your research project in industry (depending on your results and project availability) or in Kingston University's extensive forensic and analytical laboratories.

### Key features

- Kingston University has its own scene-of-crime house, which is used to recreate crime scenes and enables you to put your investigative skills into practice. This real semi-detached house is located on-site and contains five rooms representing various types of mock crime scenes, including burglary, arson, assault and sexual crime. The property's garden is used by the forensic team's archaeologist for field investigations.
- If you opt for the MSc qualification, the research project gives you the chance to study an area of interest in greater depth and gain valuable research skills. For example, past projects in this area have looked at doping in horse-racing and crime pattern modelling.
- Potential placements include forensic laboratories, analytical consultancies, contract pharmaceutical companies, hospital laboratories and research labs.
- The course is supported by visiting speakers, relevant industrial visits and a careers and networking event to develop your employability skills.

**i** See the course webpage to find out more about visiting speakers and industrial visits.

“The practicals on the course are really helpful. I got to use loads of the analytical instruments, such as GC-MS, Infrared, UV-Vis and so many more.”

Dora Namyalo, MSc Analytical Chemistry graduate

## Diploma in Pharmacy Practice (Overseas Pharmacists Assessment Programme) PgDip

[www.kingston.ac.uk/ospap](http://www.kingston.ac.uk/ospap)

**FT**

This Overseas Pharmacists Assessment Programme (OSPAP) is a conversion programme designed to enable non-EU-qualified pharmacists to receive theoretical and practical training in key topics relevant to practice in the UK. It aims to familiarise overseas-trained pharmacists (non-EU and who are not covered by Directive 2005/36/EC) with the practice of pharmacy in the UK.

### What you will study

You will receive training in pharmaceutical sciences, clinical pharmacy, pharmacy practice, and pharmacy law and practice.

Successful graduates will be eligible to apply for a one-year preregistration period in an approved pharmaceutical establishment prior to taking membership examinations from the pharmacy regulator (The General Pharmaceutical Council) and gaining entry onto the UK register of pharmacists.

Obtaining a preregistration placement is the responsibility of the student, and different visa requirements may apply for non-EU/EAA citizens. You are advised to visit the UK Borders Agency and Home Office websites for information on visas and employment.

### Key features

- On successful completion of the course you will be able to demonstrate an advanced level of proficiency in selecting and implementing appropriate business research methodologies, as well as an in-depth understanding of how health organisations are managed.
- Our academic staff have wide-ranging educational, research and industrial expertise in areas including pharmacy practice, pharmaceutical technology, pharmacology, physiology and pharmaceutical chemistry, as well as teacher practitioners from hospital and community pharmacies. This diverse and well-qualified team fosters an enthusiasm for learning and ensures that the most up-to-date clinical and scientific skills needed for practice in the UK are taught.
- You will have access to a student support officer who will provide you with help, advice and support.
- Kingston is long established as a top teaching university with excellent facilities. We also have excellent links with a number of hospitals, including St George's Healthcare NHS Trust, Kingston Hospital, Royal Marsden Hospital and University Hospital Lewisham, as well as a number of major community pharmacies, allowing you to experience the role of the pharmacist first-hand through visits or placements.

**i** See the course webpage to find out more about the staff that teach this course.

## Pharmaceutical Analysis / with Management Studies PgCert/PgDip/MSc

[www.kingston.ac.uk/pgpharman](http://www.kingston.ac.uk/pgpharman)

[www.kingston.ac.uk/pgpharmanmgt](http://www.kingston.ac.uk/pgpharmanmgt)

**FT PT**

This course enables you to gain a recognised qualification that will further your career in the pharmaceutical industry or public services, while also providing an excellent foundation for a further research degree. You will gain a strong background in the theory of analytical techniques used in pharmacy and how to apply them to complex problems in an industrially relevant context. You can choose to combine your studies with training in the fundamentals of management theory.

### What you will study

You will gain key skills in the specialised area of pharmaceutical analysis, including good measurement and scientific practice, evaluation interpretation of data, and other professional and organisational skills. In addition to studying core analytical techniques and their applications, you will be introduced to various pharmaceutical technologies; for example, formulations and topics such as clinical pharmacokinetics.

To put your studies into context, you may be offered a placement within industry (depending on your results and project availability) where you will carry out your independent research project. This could be within a pharmaceutical company, a forensic laboratory, analytical consultancy, hospital laboratory or research lab. There is also scope to study and explore recent trends in pharmaceutical analysis and the latest analytical techniques.

### Management Studies option

You can choose to include management studies within this degree. This enables you to explore the fundamentals of management theory within the commercial and public sectors, setting your scientific knowledge in a vocational context.

### Key features

- The Pharmaceutical Analysis MSc (ie not including Management Studies) provides exemption from Part A of the Mastership in Chemical Analysis, which is the statutory qualification for a public analyst.
- The management studies modules are taught by staff at Kingston Business School over 3–4 weekends, giving you the flexibility to fit in your studies around your work commitments.
- The 'with Management Studies' route is particularly useful if you are seeking to gain a management position within the pharmaceutical and allied industries.
- We have strong links with industry, ensuring the relevance of the course to the employment market.
- This course is supported by visiting speakers who are experts in their field; relevant industrial visits; and a careers and networking event.

**i** See the course webpage to find out more about visiting speakers and industrial visits.

“The facilities are magnificent, from the teaching class room in the modern John Galsworthy building, to the great labs that we had within the campus, and the LRC, which contained all the resources that any student will need.”

Ali Athab Alkinani, MSc Pharmaceutical Analysis graduate

## Pharmaceutical Science / with Management Studies PgCert/PgDip/MSc

[www.kingston.ac.uk/pgpharmsci](http://www.kingston.ac.uk/pgpharmsci)

[www.kingston.ac.uk/pgpharmscimgt](http://www.kingston.ac.uk/pgpharmscimgt)

**FT**

This course will develop your knowledge of the design, development, analysis and production of medicines, the drug industry and regulatory affairs. It is particularly suitable if you are keen to enter employment in areas such as marketing, formulation, regulatory affairs, process development, medical statistics and clinical trial organisations. You can choose to combine your studies with training in the fundamentals of management theory, which is especially suitable to those interested in taking up management positions in relevant organisations.

### What you will study

You will have the chance to explore current trends in chemical, biological and biotechnological therapeutics, and will look at the latest technologies used in the pharmaceutical industry. You will gain an understanding of the processes used in clinical trials and in the development, manufacturing and regulation of medicines. You will also develop your computing and statistical skills and other key skills, such as data collection, communication skills, time management, organisational skills and review and synopsis.

Your research project may be conducted with one of our research groups in an area such as clinical pharmacy, medicinal chemistry, formulation or pharmaceutical analysis. Alternatively, you may be offered a project within industry, a research institute or collaborating laboratory (depending on project availability).

### Management Studies option

You can choose to include management studies within this degree. This enables you to explore the fundamentals of management theory within the commercial and public sectors, setting your scientific knowledge in a vocational context.

### Key features

- You will have access to our dedicated pharmaceutical science labs.
- Research-led teaching ensures that the course content focuses on current trends and developments (see the course webpage for staff profiles). Visiting speakers who are experts in their field, and a careers and networking event also support this course.
- If you choose the course without Management Studies, you can enrol either in September or January. A part-time study option is also available for Pharmaceutical Science (Home students only).
- The management studies modules are taught over 3–4 weekends, giving you the flexibility to fit in your studies around your work commitments.
- The MSc research project gives you the chance to study an area of interest in greater depth and gain valuable research skills. Our students often find this an excellent selling point when looking for a job or promotion.

**i** See the course webpage to find out more about our pharmaceutical science labs.



# Work-based Learning



A masters degree by learning agreement recognises the learning involved in completing work-based projects, and awards learning that takes place at work. This allows you to be credited for what you are already learning and for the contribution you are making to your organisation's success.

## Professional Engineering MSc

[www.kingston.ac.uk/mscprofeng](http://www.kingston.ac.uk/mscprofeng)

Flexible

This course, which has been developed in conjunction with the Engineering Council, offers a work-based learning route to the academic qualifications and professional development you will need for registration as a chartered engineer (CEng). It allows you to acquire professional competencies alongside the MSc without the need to take time off work. The flexibility of the programme enables it to be adapted to almost any work situation, industry or location.

### What you will study

Supervisors with appropriate academic and professional qualifications work with you and your employer to design a unique programme comprising a well-defined schedule of activities and goals that also aim to meet a development need for your employer.

Typically lasting two to three years, this 'learning agreement', tailored to your specific work situation, uses your normal workplace activities in 'learning goals', which are recognised as further learning at masters level.

Our supervisors will provide the necessary guidance and support to ensure that your individual programme meets the requirements of an MSc, and to enable you to demonstrate engineering skills and competencies needed for chartered engineer status.

### Key features

- This MSc is recognised by the Engineering Council and professional engineering institutions, and provides a route to the 'further learning' required for CEng registration.
- We help to match your workplace achievement against UK-SPEC competencies in a carefully defined, step-by-step, supervised way.
- Our supervisors help to make your academic journey and progress to CEng more easily attainable.
- Prior learning can be credited towards the MSc, where applicable.
- The application process is ongoing throughout the year. There are four start points – August, November, February and May – to provide maximum flexibility.

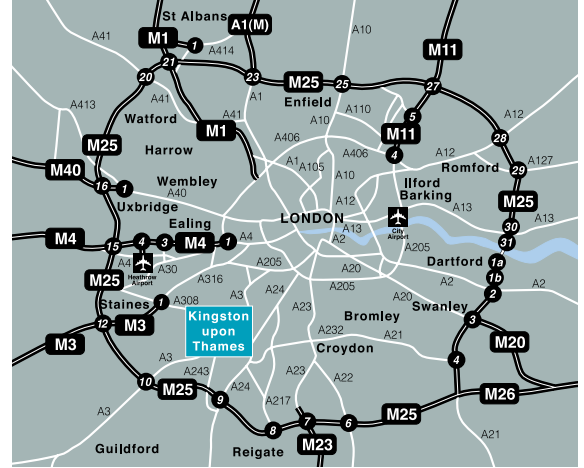
**“My individually tailored learning contract requires me to develop new engineering opportunities that will enable technical and commercial growth for Summit Aviation.”**

Ken Wills, Managing Director and founder of Summit Aviation, and MSc Professional Engineering graduate

# Travelling to Kingston



Kingston University within the British Isles  
 Kingston University within the M25  
 Kingston University campuses and other sites



**Trains**  
 Trains from London Waterloo station, via Clapham Junction and Wimbledon, are frequent to both Kingston (for all campuses) or Surbiton (for Penrhyn Road and Knights Park campuses only). Trains go direct from Kingston and Surbiton to Waterloo.  
[www.nationalrail.co.uk](http://www.nationalrail.co.uk)

**Buses**  
 From London

- 57 (Streatham)
- 65 (Ealing)
- 71 (Chessington)
- 85 (Putney Bridge)
- K3 (Roehampton and Esher)
- X26, 111 and 285 (Heathrow)
- 213 (Sutton)
- 216 (Staines)

[www.tfl.gov.uk](http://www.tfl.gov.uk)

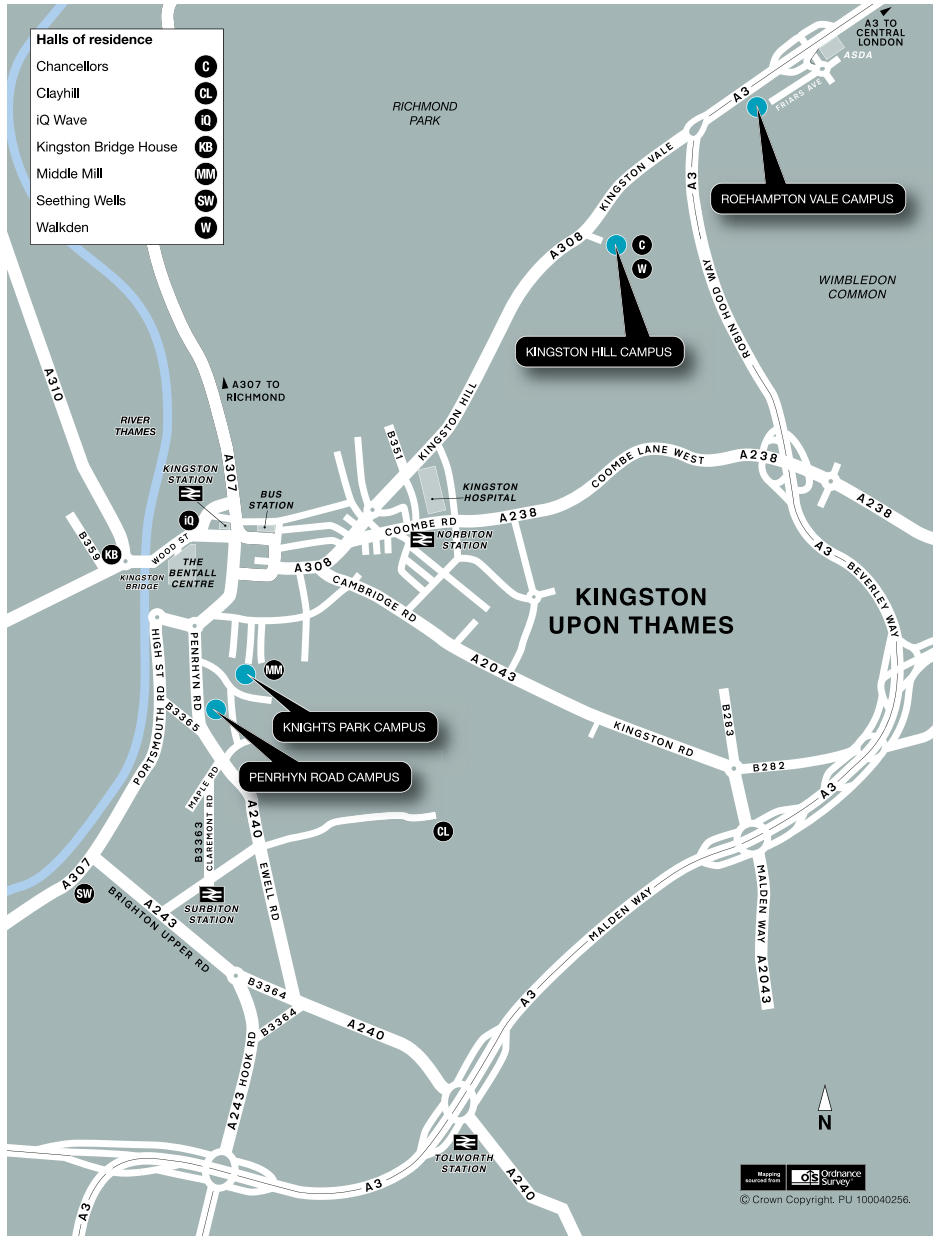
**From Heathrow**

- Take the X26, 111 or 285 bus to Kingston
- By tube/train: take the Piccadilly Line underground service to Earls Court, change to District Line to Wimbledon, and catch a mainline train for Kingston or Surbiton.

**From Gatwick**

- Take a train to Clapham Junction, and catch a Kingston- or Surbiton-bound train.

**Further information**  
 For detailed instructions on travelling to the Kingston University campuses, see the University's website:  
[www.kingston.ac.uk/directions](http://www.kingston.ac.uk/directions)



# Applications and further information

## Applications

You can now apply for most of our postgraduate courses online. Just visit the course webpage or see [www.kingston.ac.uk/pgapply](http://www.kingston.ac.uk/pgapply) for more information, including how to apply by post or email.

## Entry requirements

Please see the relevant course webpage for entry requirements or contact the appropriate person for further information.

You will be expected to demonstrate the ability to study at an advanced level and will normally have relevant professional experience in a setting appropriate to the chosen specialism.

Overseas applicants must be able to demonstrate that they are able to study at masters level and have achieved the equivalent academic level. They must also have a good level of competence in written and spoken English.

## Prior learning – AP(E)L

Applicants offering prior qualifications and learning may be exempt from appropriate parts of a course in accordance with the University's mechanisms and policy for the assessment of prior learning and prior experiential learning.

## Interview

Home applicants may be invited to attend an interview prior to selection. Overseas applicants may be exempt from interview as long as they can demonstrate that they meet the specified entry requirements.

## Research degrees

For further information on research degrees, see page 31.

## Students with disabilities

The University welcomes applications from students with disabilities and is working towards improving access, facilities and services.

If you think you may require individual support or adaptations to facilities, our Disability Advisor can give you information on what is available. Once we have received your application form with details of your disability, we may invite you to visit the University to talk to you about your needs in advance. The University Disability Statement gives detailed information of the types of support available and of the accessibility of each site. The Statement is available in standard, large print or braille, on audiotape and on the University website.

For more information or a copy of the University Disability Statement and Policy, or to arrange a visit to assess the University's facilities, contact:  
Disability Advisor  
Kingston University  
Penrhyn Road  
Kingston upon Thames  
Surrey KT1 2EE  
T: +44 (0)20 8417 4282  
Minicom: +44 (0)20 8417 4447  
F: +44 (0)20 8417 4443  
[www.kingston.ac.uk/disability](http://www.kingston.ac.uk/disability)

## International students

Faculty staff visit international education fairs, where you can talk to them about our courses and programmes. For details of the fairs and to find out what Kingston University has to offer international students, see [www.kingston.ac.uk/international](http://www.kingston.ac.uk/international)

To request a copy of our *International Student Guide*, email [int.recruit@kingston.ac.uk](mailto:int.recruit@kingston.ac.uk)

## Tuition fees

Tuition fees for your course can be found on the course webpage. For information about payment options, please contact Applicant Services. Please check our website for the latest fee information: [www.kingston.ac.uk/pgfunding](http://www.kingston.ac.uk/pgfunding)

## General Student Regulations

Acceptance of an offer and enrolment at the University are subject to the then current General Regulations of the University; a copy of which can be seen at [www.kingston.ac.uk/policies](http://www.kingston.ac.uk/policies)

Please note that nothing within the contents of this prospectus or the University website is intended to constitute a placement offer (or form part of an offer) to any prospective student, nor should it be construed as such.

## Disclaimer

This prospectus was issued in July 2011 and is primarily intended for use by prospective students wishing to start courses in 2012. It gives an outline of the courses and services offered by Kingston University. The information was correct at the time of going to press.

The University makes every effort to ensure that the contents of and statements made in this prospectus are fair and accurate, but it cannot accept any responsibility for omissions, errors or subsequent changes that may occur.

The statements made and the information provided is a general guide, and there may be changes following publication that affect the contents. Programmes or modules may be revised, altered or withdrawn without notice, and assessment arrangements may be changed. It should be noted that information on entry requirements for courses and modules is for guidance only. The conditions attached to offers may vary from year to year and from applicant to applicant.

**The University website contains the most up-to-date information available and should be checked before applying. Every effort is made to ensure that any changes referred to above are updated on the website as soon as practicable, however the University cannot be held responsible for any delays in doing so.**

## How to find us

For information on travelling to Kingston and the University sites, please see the page opposite or visit our website: [www.kingston.ac.uk/directions](http://www.kingston.ac.uk/directions)

## Acknowledgements

Designed, produced and published by:  
Communications  
Corporate Affairs  
Kingston University  
River House  
53–57 High Street  
Kingston upon Thames  
Surrey KT1 1LQ

Printed by: IOS  
Printed on: Ability Offset, an FSC accredited paper  
Cover by: Demographik  
Photography by: Michelle Sadgrove, Jo Mieszkowski, Paul Carter, Ben Higham and Phil Mowbray.

*A special thanks to all Kingston students and staff who let us take their photos and who told us all about life and study at Kingston.*

# Useful links

## Courses

Kingston University offers a wide range of courses across a variety of subject areas. We continually add to and update our portfolio of courses. For the latest details, including entry requirements and how to apply, visit our website: [www.kingston.ac.uk/courses](http://www.kingston.ac.uk/courses)

## Visit us

Why not come and visit the University to discover more about us and our courses? To find out how to arrange a visit, contact your faculty. See: [www.kingston.ac.uk/faculties](http://www.kingston.ac.uk/faculties)

## Virtual tour

If you aren't able to come and visit us in person but you'd still like to see what the University is like, you can take a virtual tour of the University campuses on our website: [www.kingston.ac.uk/tour](http://www.kingston.ac.uk/tour)

## Accommodation

To find out about all the accommodation options you'll have as a Kingston student, with advice and guidance from our specialist staff, see: [www.kingston.ac.uk/accommodation](http://www.kingston.ac.uk/accommodation)

## Money matters

Funding a postgraduate course can be a big financial commitment. At Kingston we'll do everything we can to help you keep your finances in order. See: [www.kingston.ac.uk/pgfunding](http://www.kingston.ac.uk/pgfunding)

## International

For guidance and advice for students from overseas, including the opportunity to chat with virtual student advisors, watch video clips of current international students and find out about funding opportunities, see: [www.kingston.ac.uk/international](http://www.kingston.ac.uk/international)

T: +44 (0)8448 552 177

E: [pgaps@kingston.ac.uk](mailto:pgaps@kingston.ac.uk)

[www.kingston.ac.uk](http://www.kingston.ac.uk)